

# LAND RECLAMATION COMMISSION

STATE OF MISSOURI

P.O. BOX 176

JEFFERSON CITY, MISSOURI 65102

573-751-4041

## Permit to Engage in Surface Mining

LAND RECLAMATION COMMISSION

ISSUES TO

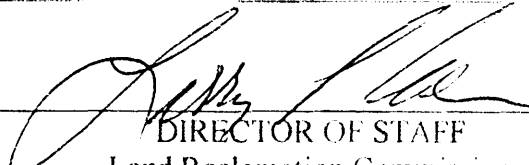
LEO JOURNAGAN CONSTRUCTION COMPANY, INC.

Pursuant to "The Land Reclamation Act," RSMo, 2001, and on conformity with the statements in the application, a permit is hereby granted to engage in surface mining of limestone in the state of Missouri. The extent of the proposed mining operation(s) will be on 527 acres, more or less. The locations of the operation(s) under this permit is/are as follows: Renewal

See Attached List

This permit may be suspended or revoked upon violation of any or all of the conditions set forth in "The Land Reclamation Act," RSMo. 2001, or in such rules and regulations as are promulgated pursuant thereto by the Land Reclamation Commission.

IN WITNESS WHEREOF I have hereunto set my hand this 28th day of July 2004

  
\_\_\_\_\_  
DIRECTOR OF STAFF  
Land Reclamation Commission

Permit No. 0287

Effective Date 08/01/2004

Expiration Date 07/31/2005

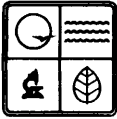
MO 780-1122 (6-95)

**Company Name: LEO JOURNAGAN CONSTRUCTION COMPANY, INC.**

**Permit Number: 0287**

**Expiration Date – 07/31/2005**

[illegible]



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

PERMIT RENEWAL FOR INDUSTRIAL MINERAL MINES

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P.O. BOX 176  
JEFFERSON CITY, MO 65102-0176

NAME OF CORPORATION, COMPANY, PARTNERSHIP OR INDIVIDUAL <b>Leo Journagan Construction Company, Inc.</b>		MISSOURI LAND RECLAMATION COMMISSION		DATE <b>June 29, 2004</b>
ADDRESS <b>3003 East Chestnut Expressway, Suite 1200</b>	CITY <b>Springfield</b>	STATE <b>Missouri</b>	ZIP CODE <b>65802</b>	
CONTACT PERSON <b>Dwayne Harrison</b>		TELEPHONE NUMBER <b>417-337-8877</b>		

FEES: COMPLETE SECTION I OR SECTION II

SECTION I. Fees: Open pit operators and those mining more than 5,000 tons of sand and/or gravel:


1. To compute the site fee complete the information below:

SITE NAME OR NUMBER (add a separate sheet for additional sites)	Mark each month that the site will be operated during the permit year	For sites operated less than six months per permit year pay \$150 For sites operated six months or more per permit year pay \$300
1.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
2. <b>(See Next Page For</b>	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
3. <b>List of Sites.)</b>	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
4.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
5.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
6.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
7.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
8.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
9.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
10.	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
TOTAL SITE FEE	← * Note - 617 includes an expansion application for 90 acres that has not yet been approved.	\$ 3600
2. Acreage Fee \$5 X 617 num		\$ 3085
3. Annual Permit Fee		\$ 500
4. Total Fee (Add totals from 1, 2 and 3)		\$ 7185
NOTE: If Total Fee exceeds \$2,500.00 then pay only		\$ 2,500

SECTION II. FEES: Sand or gravel operators mining less than 5,000 tons per year:

1. Annual Permit Fee \$ 300

SIGNATURE OF APPLICANT <i>Dwayne Harrison</i>	TITLE <i>Env. Engr.</i>	DATE <i>June 29, 2004</i>
Appeared before me this <i>29</i> day of <i>June</i> , 20 <i>04</i> , <i>Dwayne Harrison</i> to me personally known, who executed the above as their free acts and deeds.		
NOTARY PUBLIC EMBOSSEER SEAL	STATE OF <i>Missouri</i> SUBSCRIBED AND SWORN BEFORE ME, THIS <i>29</i> DAY OF <i>June</i> YEAR <i>2004</i> NOTARY PUBLIC SIGNATURE <i>Nina I Craighead</i> NOTARY PUBLIC NAME (TYPED OR PRINTED) <i>Nina I Craighead</i>	COUNTY (OR CITY OF ST. LOUIS) <i>Greene</i> USE RUBBER STAMP IN CLEAR AREA BELOW.  NINA I. CRAIGHEAD Greene County My Commission Expires November 21, 2007
USE ONLY: APPROVED BY <i>[Signature]</i>	DATE APPROVED <i>7/20/04</i>	PERMIT NUMBER <i>0287</i> EXPIRATION DATE <i>7/31/05</i>

SITE NAME OR NUMBER (add a separate sheet for additional sites)		Mark each month that the site will be operated during the permit year	For sites operated less than six months per permit year pay \$150 For sites operated six months or more per permit year pay \$300
1. Ava	0344	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
2. Battlefield	0345	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$150
3. Black	0346	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$150
4. Eudora	0347	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$150
5. Gainesville	0348	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
6. Hilda	0349	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
7. Hollister North	0350	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
8. Hollister South	0351	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
9. Hwy. 376	0352	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
10. McCracken	0357	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
11. Protem	0354	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$150
12. Ozark	0343	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
13. Reeds Spring	0355	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
14. Shell Knob	0356	Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$300
15.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
16.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
17.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
18.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
19.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
20.		Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec	\$
TOTAL SITE FEE 			\$3,600

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MISSOURI LAND  
RECLAMATION COMMISSION





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

file

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

9

Ava

PERMIT NUMBER

287

COMPANY NAME

Leo Journagan Construction Company, Inc.

COUNTY

Douglas

1/4 SECTION

NW, SW, SE

SECTION

25 & 36

TOWNSHIP

26N

RANGE

16W

ACRES

170 M.O.L.

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

NA

MINERAL COMMODITY

Limestone

ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NA

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Leo Journagan Construction Company, Inc.

ADDRESS

3003 East Chestnut Expressway, Suite 1200

CITY

Springfield

STATE

MO

ZIP CODE

65802

SOURCE OF RIGHT TO MINE (CHECK ONE):

☐ MINERAL DEED

☐ LEASE

☒ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER (DESCRIBE):

DATE OF AGREEMENT

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Leo Journagan Construction Company, Inc.

ADDRESS

3003 East Chestnut Expressway, Suite 1200

CITY

Springfield

STATE

MO

ZIP CODE

65802

SOURCE OF RIGHT TO MINE (CHECK ONE):

☐ MINERAL DEED

☐ LEASE

☒ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER (DESCRIBE):

DATE OF AGREEMENT

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**MINE PLAN**

P.O. BOX 176  
JEFFERSON CITY, MO 65102

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE:

7-31-2022

Ava; Site 9

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

Site No. 9:

40± acres has previously been mined and/or used as an industrial site. This portion is nearly 100% exposed rock. The remaining acreage is hilly and covered with timbers. Soil is thin and rocky. A county road borders the SW corner of the property. There are currently 7 acres under ~~pond~~ at this location.

band

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

4

INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Dozers will strip and remove trees. Scrapers will remove topsoil and sufficient overburden to maintain the 12" depth requirement for topsoil. This topsoil will be stockpiled near the north side of the property so that it will be segregated from overburden and spoils during mining. Topsoil will be removed 20' ahead of pit excavation.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Topsoil will be stored along the north property boundary temporarily during the mining operation. Seed will be applied to the topsoil stockpiles to control erosion.

287 Journeagan

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐ ☒ Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?☐ ☒ Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)☐ ☒ Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)RECEIVED  
OCT 04 1996

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OCT 21 1996  
MISSOURI LAND  
RECLAMATION COMMISSION

Revised 10/17/96

Permit #287

Ava

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.**

**A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

To be used on areas that will be disturbed repeatedly during the life of the mine.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Brome grass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown vetch	8		
Smooth Brome grass	12		
Orchard grass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
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**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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OCT 15 1996

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available, to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading**

10 CSR 40-10.050(10)(A)&(C)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

46

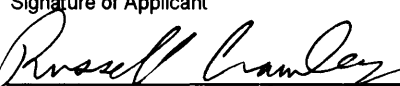


Water Impoundments (for wildlife, agricultural, or development)

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OCT 4 1996

By my signature, I attest to the following:

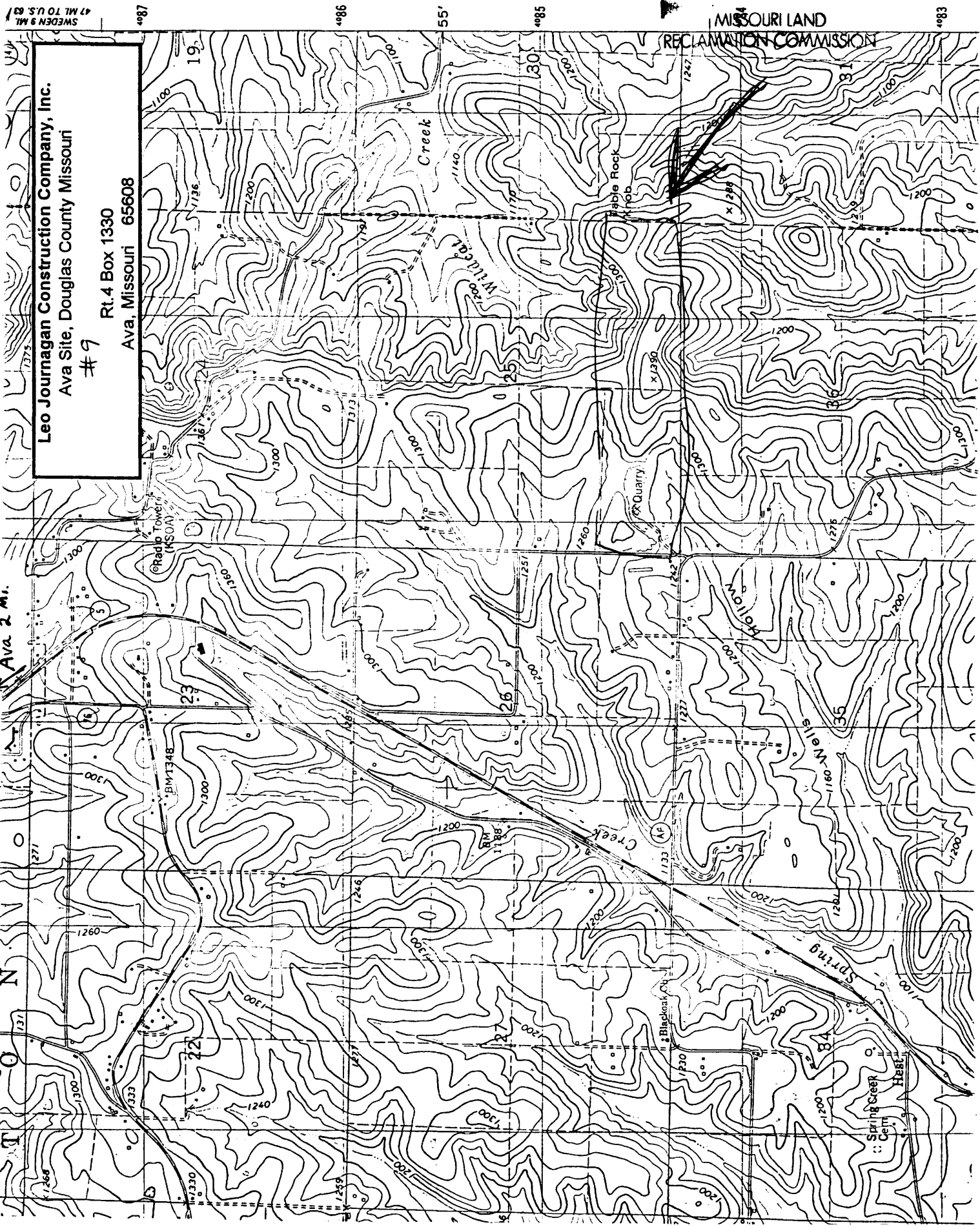
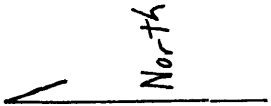
1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowners for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Leo Journagan Construction Company  
Ava Quarry  
Permit 287

Signature of Applicant 		Title Environmental Geologist		Date October 1, 1996	
Notary Public Embosser Seal	State Missouri			County (Or City of St. Louis) Greene	
	Subscribed and Sworn Before me, This 01 Day Of October 1996			Use Rubber Stamp Below	
	Notary Public Signature 		My Commission Expires 11-4-99		NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) Nina I. Craighead				
Approved By (Director's Representative) 			Date Approved 11-22-96		Permit Number 0287

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JUL 31 1996

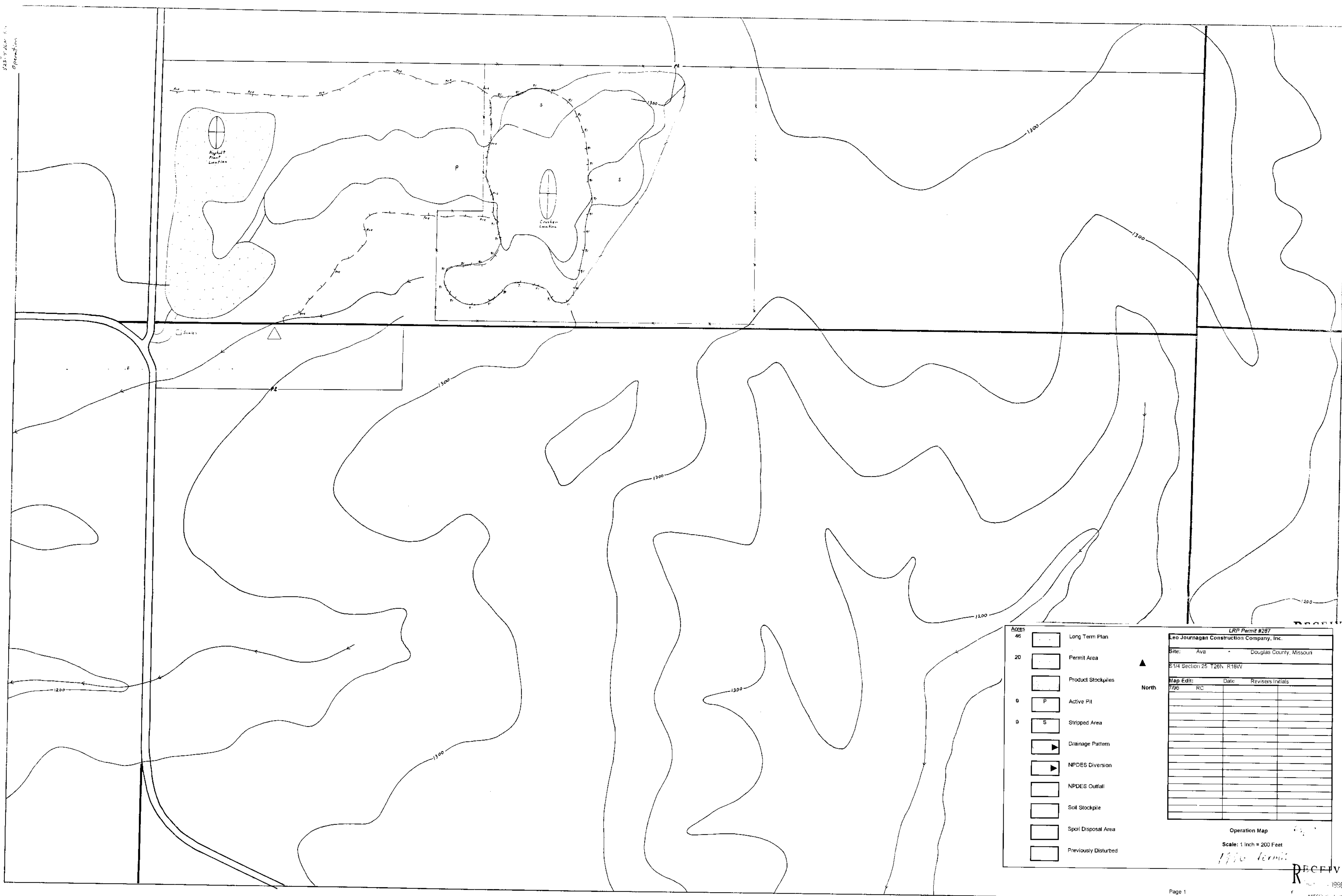


Leo Jounagan Construction Company, Inc.  
Ava Site, Douglas County Missouri  
#9  
Rt. 4 Box 1330  
Ava, Missouri 65608

MISSOURI LAND  
RECLAMATION COMMISSION



528-7400  
Operation



**Legend**

Acres	Symbol	Description
46	[Hatched Box]	Long Term Plan
20	[Dotted Box]	Permit Area
	[Dotted Box]	Product Stockpiles
9	[Box with 'P']	Active Pit
9	[Box with 'S']	Stripped Area
	[Arrow]	Drainage Pattern
	[Arrow]	NPDES Diversion
	[Box]	NPDES Outfall
	[Box]	Soil Stockpile
	[Box]	Spoil Disposal Area
	[Box]	Previously Disturbed

**North** ▲

**LRP Permit #287**  
**Leo Journagan Construction Company, Inc.**  
Site: Ava Douglas County, Missouri  
S1/4 Section 25 T26N, R16W  
Map Edit: Date Revisers Initials  
7/96 RC

**Operation Map**  
Scale: 1 inch = 200 Feet  
1996 Permit

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MISSOURI RECLAMATION COMMISSION

Acres				
48	<input type="checkbox"/>	Long Term Plan	▲  North	<p>LRP Permit #287</p> <p>Leo Journagan Construction Company, Inc.</p> <p>Site: Ava Douglas County, Missouri</p> <p>S1/4 Section 25 T26N R16W</p> <p>Map Edit: Date Revisers Initials</p> <p>7/98 RC</p>
20	<input type="checkbox"/>	Bonded Area		
	<input type="checkbox"/>	Bond Released		
	<input type="checkbox"/>	G Grading Completed		
	<input type="checkbox"/>	T Topsoil Replaced		
	<input type="checkbox"/>	I Impoundment		
46	<input type="checkbox"/>	D Development		
	<input type="checkbox"/>	A Agriculture		
	<input type="checkbox"/>	W Wildlife		
	<input type="checkbox"/>			

Reclamation Map

Scale: 1 Inch = 200 Feet

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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER 2 <i>Battlefield</i>		PERMIT NUMBER 287
COMPANY NAME Leo Journagan Construction Company, Inc.		
COUNTY Christian	1/4 SECTION SW, SE, NW	SECTION 9
TOWNSHIP 27N	RANGE 23W	ACRES 51
RIVER OR STREAM NAME (FOR IN-STREAM ACRES) NA		
MINERAL COMMODITY Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES) NA

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) Leo Journagan Construction Company, Inc.		
ADDRESS 3003 East Chestnut Expressway, Suite 1200		
CITY Springfield	STATE Missouri	ZIP CODE 65802
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____		DATE OF AGREEMENT NA
<input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) Leo Journagan Construction Company, Inc.		
ADDRESS 3003 East Chestnut Expressway, Suite 1200		
CITY Springfield	STATE Missouri	ZIP CODE 65802
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____		DATE OF AGREEMENT NA
<input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		

**NOTE:** Each site must be shown on a map and be included in a public notice and an approved mine plan.

FILE

Revised 10/02/96  
Missouri Department Of Natural Resources  
Land Reclamation Program

Permit #287

Battlefield  
P.O. Box 176  
Jefferson City, MO 65102

**Mine Plan**

☐ Short Term, For One Permit Year  
☒ Long Term, For Period Through Date: July 31, 2022

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Pasture and small area (3 ac.) of hardwood forest.

**Soil and Topography:**

Goss Series: Cherty-skeletal, mixed, mesic Typic Paleudalfs, 7 percent slope.

A Horizon: 6 inches, cherty silt loam, 25% fragments.

B Horizon: 54 inches, very cherty silty clay, 45% fragments.

**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting 6 inches	Is Topsoil to be Sold or Discarded Offsite? <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
---	---

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may contain both the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

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OCT 9 4 1996

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas.

There will be one spoil disposal location at this quarry. The disposal areas will be active for the entire life of the mine.

A safety berm has been constructed with B horizon material around the perimeter of the property. This berm limits unauthorized access to the property and equipment on the site. This berm also functions as a visual screen for those living within sight of the processing and distribution areas.

*Newest***C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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NOV 14 1996

MISSOURI LAND  
RECLAMATION COMMISSION

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #1

**A**

Purpose Or Land Use

Temporary Cover

Seeding Or Planting Time

As Needed

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2

**B**

Purpose Or Land Use

All land uses except impoundments

Seeding Or Planting Time

Fall, Spring &amp; Frost

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

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OCT 15 1996

Attach Additional Sheets For Additional Seed Mixes

MEMO

File: Journagan Quarry, Christian County Site

Date: June 26, 1996

Reviewer: Harvey Petersen 

Subject: Vegetation Mix Review

*site*  
*Battlefield (#2)*

The top six (6) inches of soil material they have to work with is described as a cherty silt loam. This appears to be typical "Ozark" plateau surface material. Far from ideal material to work with.

Mixture A: They are using this mix for temporary cover. I'm assuming they will be using this on their topsoil stockpiles with relatively steep slopes where the primary requirement is for cover and erosion control.

- \* Ladino Clover. This legume is used primarily for pasture use and is generally not known for any "erosion" control capabilities. Many of your legumes will almost disappear in the winter and not offer anything for cover or erosion control.

- \* Smooth Brome grass. This grass will offer good erosion control in areas of the northern plains states. Missouri is a transition zone. Southern Missouri is for the most part out of the recommended use zone. It requires a deep fertile soil, one that I don't think Journagan has available.

- \* Annual Ryegrass. This will offer good temporary cover. Uncontrolled it can smother out young grasses trying to become established.

- \* Little Bluestem: I question why they would even consider this grass for temporary cover, considering it is more expensive and a slow growing bunch grass. It will grow well in heavy clay droughty soils however.

If they are looking at temporary cover, why not use a high rate (40-60#) of perennial rye. This is fast growing, gives excellent erosion control and summer and fall growth will protect the areas throughout the winter. They are also located in a more appropriate area of the U.S. for growing this grass. Fescue can be mixed in with the rye, but as we discussed there could be some seed carryover when redistributed and if used on a wildlife area would need good management to keep it suppressed.



Journagan Veg. Mix  
June 26, 1996  
Page 2

Mixture B: Page 3. I don't see too much wrong with this mix other than the rates are too low for broadcasting. It needs to be increased about 50% or more. The orchardgrass rate is at a low rate for a mixture. This should be increased to at least 10-12 lbs. They also need to realize that they will be seeding in less than desirable soil material. The cheapest seeding is always the first one. I see no reason to include the bluestem. How can you manage for cool and warm season species at the same time. Save your money. Add some timothy if another grass is wanted.

Mixture C: Page 3 (copy). If they want to establish a warm season wildlife area it would do well to use a mixture of 3 or 4 warm season species. I believe they can be purchased in an acceptable already prepared package. The ladino will not contribute much but its cheap and nice to have available. I would prefer to add Korean or Kobe Lespedeza at the 5# rate to the seed mix. The seed mix listed needs to be drilled. If they want to broadcast, they need to use a cultipacker to push the seed into direct contact with the soil and provide a seal on the soil surface to help hold in moisture for the seed to germinate.

*Site 18*

The mix listed in the mine plan for Willow Springs site has more chance for success, but still needs to be cultipacked after seeding. According to the NRCS, The rates appear to be appropriate for a wildlife mix.

All legumes need to be inoculated.

Mixture D: Wildlife tree planting. I have no comment on this mix or would be familiar with success rates from seed. The stems per acre would be adequate considering a 50% success rate.

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

The berm around the perimeter of the property complies with the exemption from grading requirements as provided by 10 CSR 40-10.050(5)(B) 3 and 5. Jouragan Construction considers paragraph 3 to fit this reclamation situation best.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading****10 CSR 40-10.050(10)(A)**

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil****10 CSR 40-10.050(10)(A)**

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

17

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

34

Water Impoundments (for wildlife, agricultural, or development)

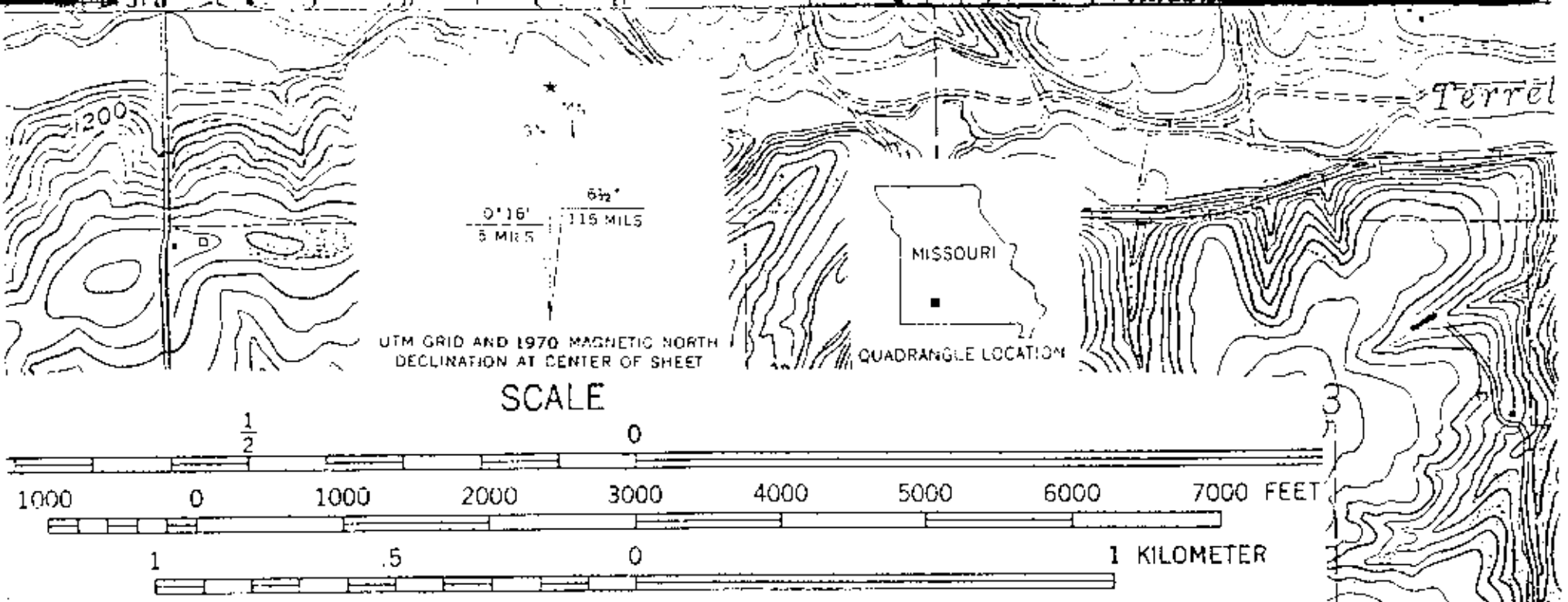
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By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and future where I have no such right, I have attached signed affidavits from the landowners, granting such access.

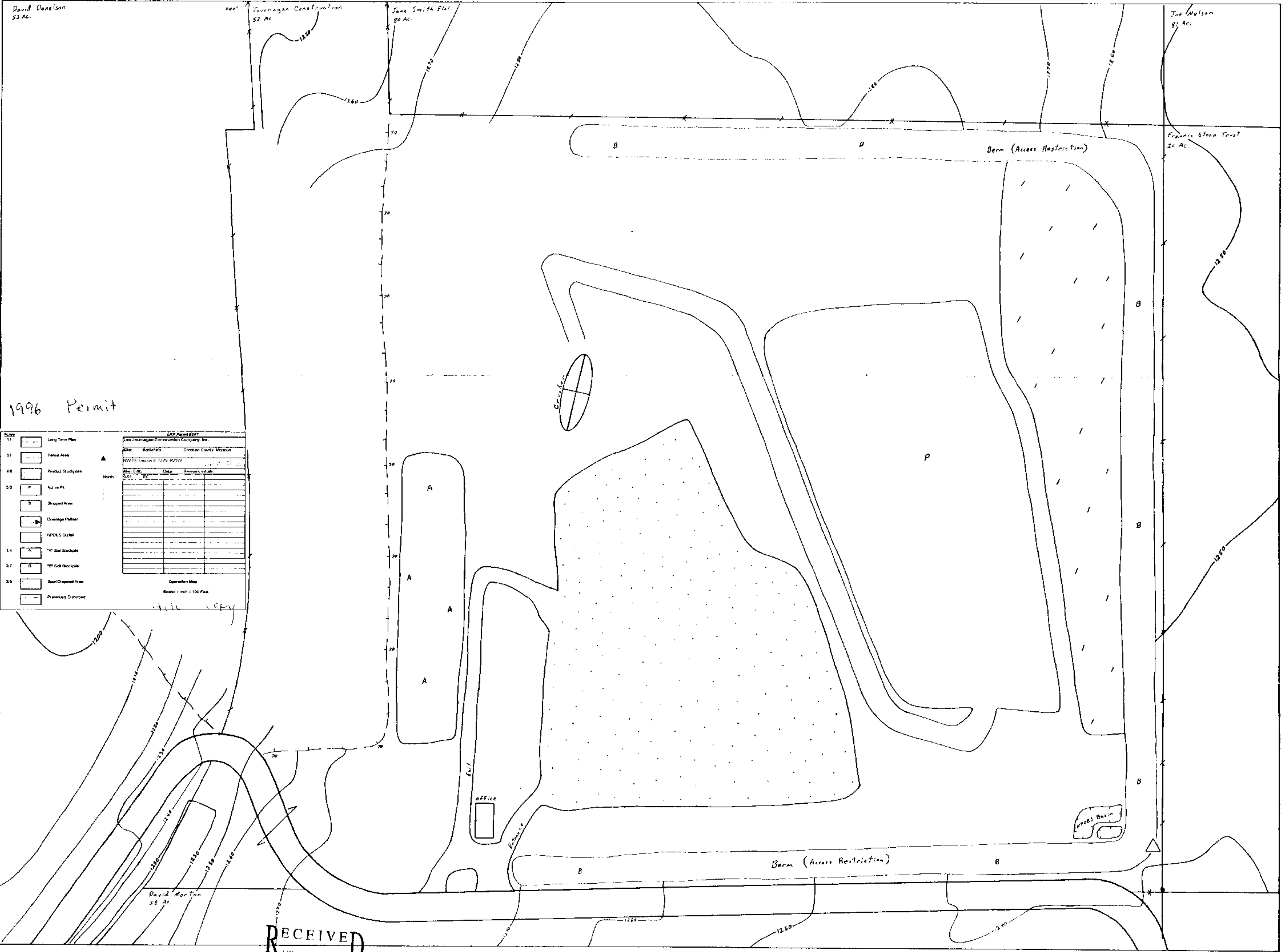
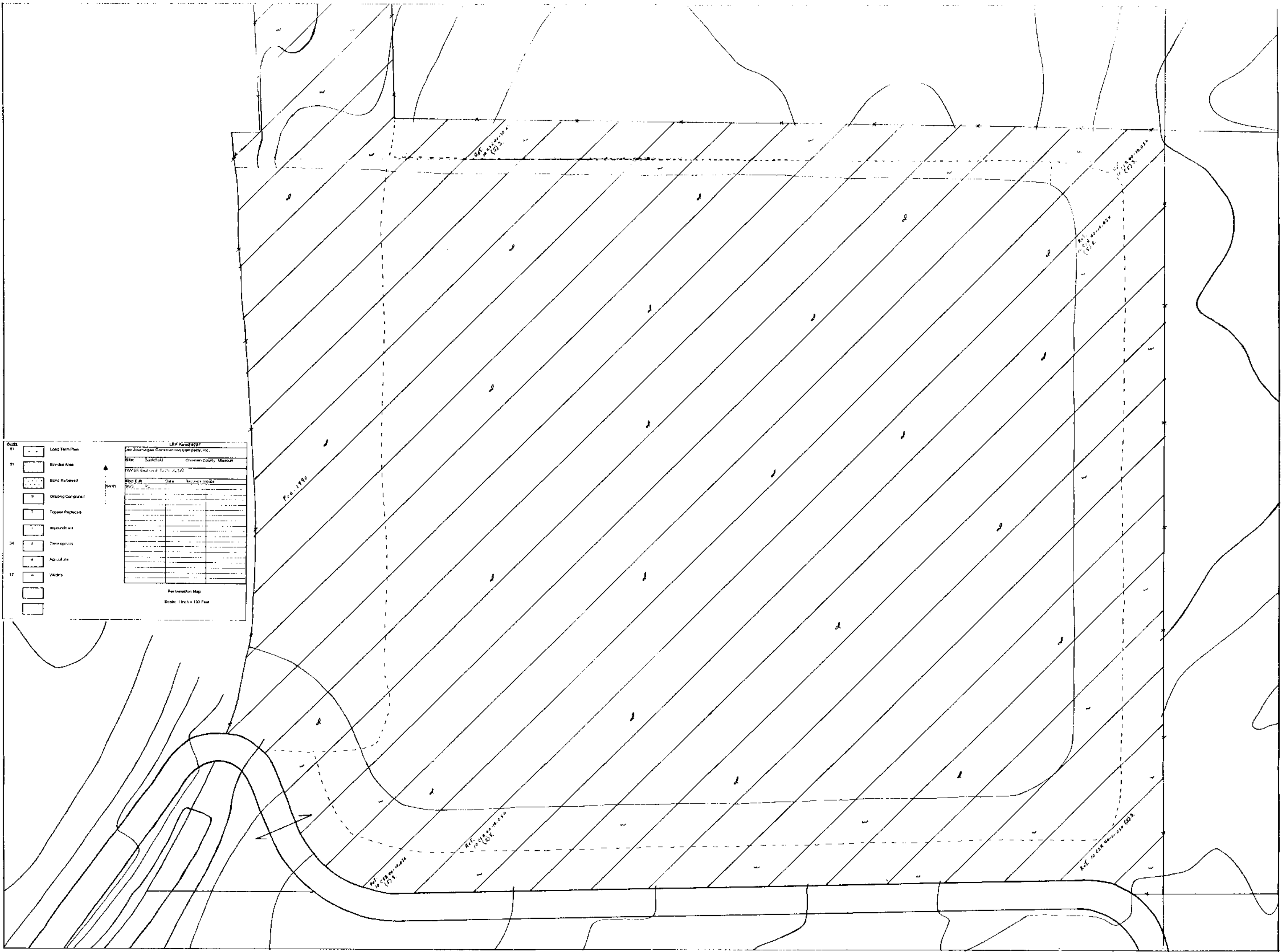
Buttefield

Signature of Applicant <i>Russell Crawley</i>		Title Environmental Geologist	Date October 02, 1996
Notary Public Embosser Seal	State Missouri	County (Or City of St. Louis) Greene	
	Subscribed and Sworn Before me, This 2 Day Of October 1996		Use Rubber Stamp Below
	Notary Public Signature <i>Nina I. Craighead</i>	My Commission Expires 11-4-999	NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) Nina I. Craighead		
Approved By (Director's Representative) <i>Lorna R. Pearson</i>		Date Approved 11-22-96 OCT 4 1996	Permit Number 0287



CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929





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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

**MINE PLAN**

P.O. BOX 176  
JEFFERSON CITY, MO 65102

*Inspector*

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE:

7-31-2007

*Black Quarry  
Site 6*

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

The site consist of 80 acres m.o.l. The site is covered with cedar saplings and trees. Topography is very steep, hilly, and the topsoil is rocky (as expected with cedars). An industrial area and commercial building cover about 10 acres, however, it is not active. The current mine acreage is 2. Pit floor has been cleared of overburden. Area above highwalls has been graded to a traversable topography. No additional bonding is planned during 1992 or 1993.

**OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.**

**A. TOPSOIL**

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

Less than 4 INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Following tree removal by dozing scrapers, haul trucks will be used to remove topsoil and overburden to a depth of 12" and the two soils will be stockpiled in an area separate from other materials. Topsoil removal will remain a minimum of 20' ahead of pit excavation.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Scrapers/haul trucks will deposit topsoil/overburden in segregated storage sites. If the mining operation is to be less than one (1) year the stockpiles will be covered. Otherwise they will be seeded to control erosion.

**B. SPOIL**

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

Spoil placement will be outside the pit, industrial, and commercial areas. Berms will be built and shaped to prevent ingress to the highwall/pit area. As old portions of the mine become mined out the spoils will be evenly distributed over the pit area. Exterior slopes will be traversable. Some spoils may be used for fill material offsite depending on offsite location.

**C. ACID MATERIALS**

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

None

**D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)**

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

See map

**YES      NO**

☐ ☒ Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐ ☒ Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐ ☒ Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes



**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc).

**C. Describe The General Sequence and Timing of the Following Activities****Grading**

10 CSR 40-10.050(10)(A)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material


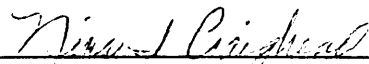
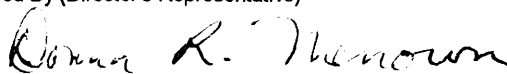
<b>D. Use of Land When Reclaimed</b>	<b>Estimated Acres:</b>
Estimated acreage of each land use below, after reclamation	
Wildlife (forest or other habitat with livestock excluded)	
Agriculture (pasture, cropland, and horticultural)	10
Development (residential, industrial, and recreational)	2
Water Impoundments (for wildlife, agricultural, or development)	

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By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowners for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Leo Journagan Construction Company  
Black Quarry  
Permit 287

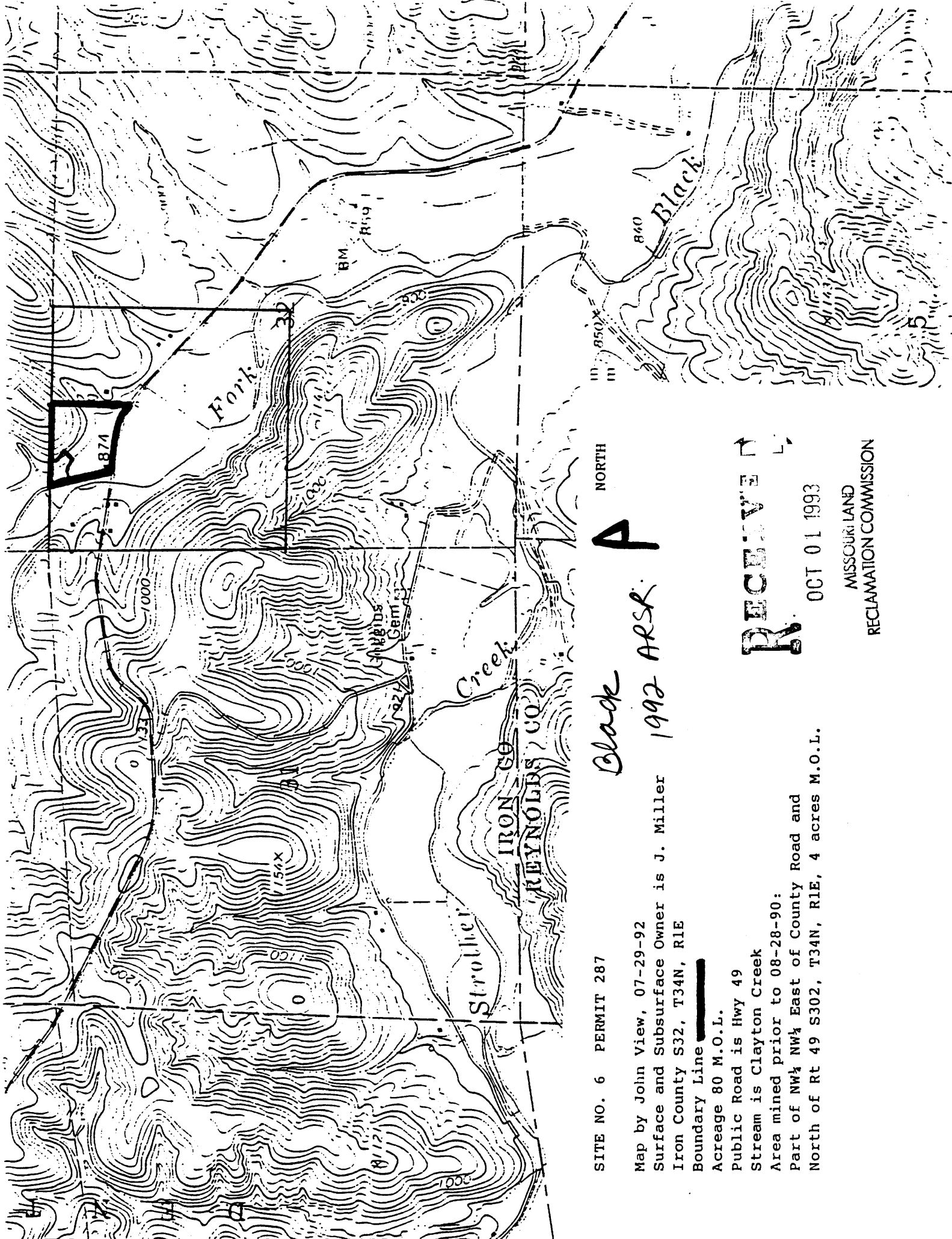
Signature of Applicant 		Title Environmental Geologist	Date October 1, 1996
Notary Public Embosser Seal	State Missouri		County (Or City of St. Louis) Greene
	Subscribed and Sworn Before me, This 01 Day Of October 1996		Use Rubber Stamp Below
	Notary Public Signature 	My Commission Expires 11-4-99	NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) Nina I. Craighead		
Approved By (Director's Representative) 		Date Approved OCT 04 1996	Permit Number 0287

MO 780-1327 (12-91)

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Page 5 of 5



SITE NO. 6 PERMIT 287

Map by John View, 07-29-92  
Surface and Subsurface Owner is J. Miller  
Iron County S32, T34N, R1E  
Boundary Line

Acreage 80 M.O.L.

Public Road is Hwy 49

Stream is Clayton Creek

Area mined prior to 08-28-90:

Part of NW $\frac{1}{4}$  NW $\frac{1}{4}$  East of County Road and

North of Rt 49 S302, T34N, R1E, 4 acres M.O.L.

NORTH

**A**

*Black*

*1992 ARSR*

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[illegible]

**Operation Map**

**Scale: 1 Inch = 100 Feet**

1796 Permit

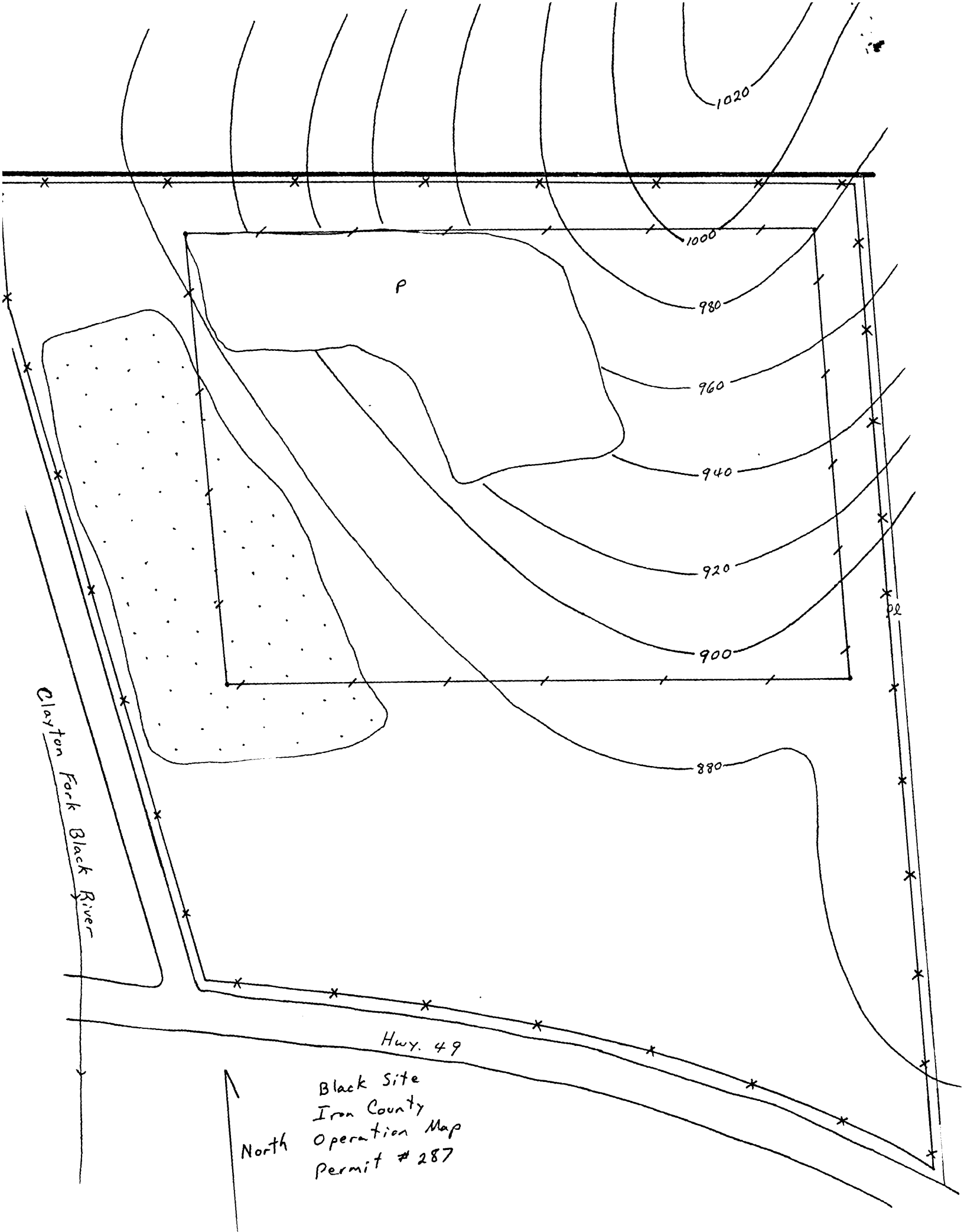
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Page 1

Inspector



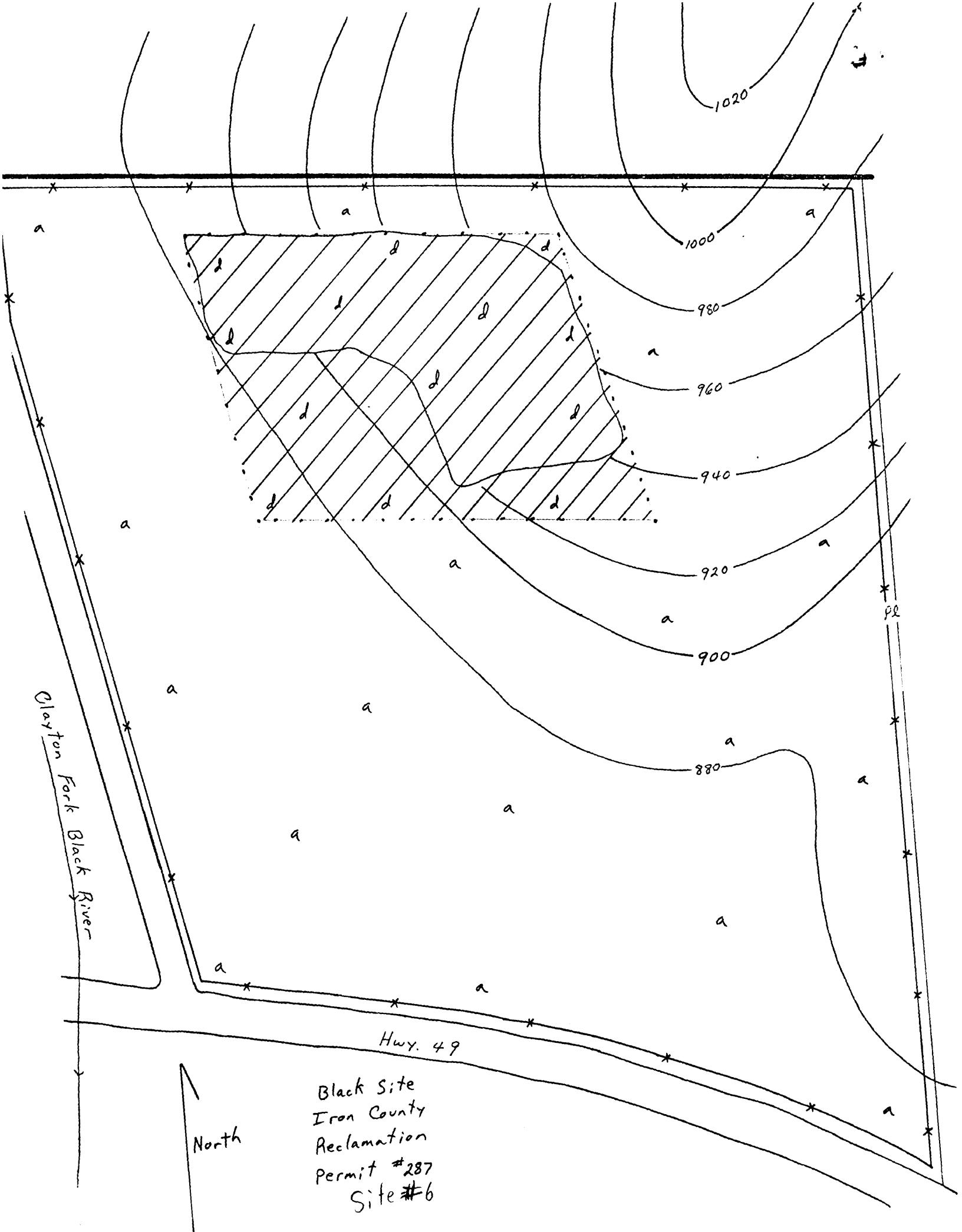
# Reclamation

Acres		LRP Permit #287	
12	Long Term Plan	Leo Journagan Construction Company, Inc.	
5	Bonded Area	Site #16 Iron County, Missouri	
	Bond Released	NW1/4 NW1/4 Section 32 T34N R01E	
	Grading Completed	Map Edit:	Date
	Topsoil Replaced	7/96	RC
	Impoundment		
2	Development		
10	Agriculture		
	Wildlife		

Reclamation Map *Aug 2014*  
 Scale: 1 Inch = 100 Feet  
*1996 Permit*

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 OCT 9 4 1996  
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 RECLAMATION COM.

*Inspector*

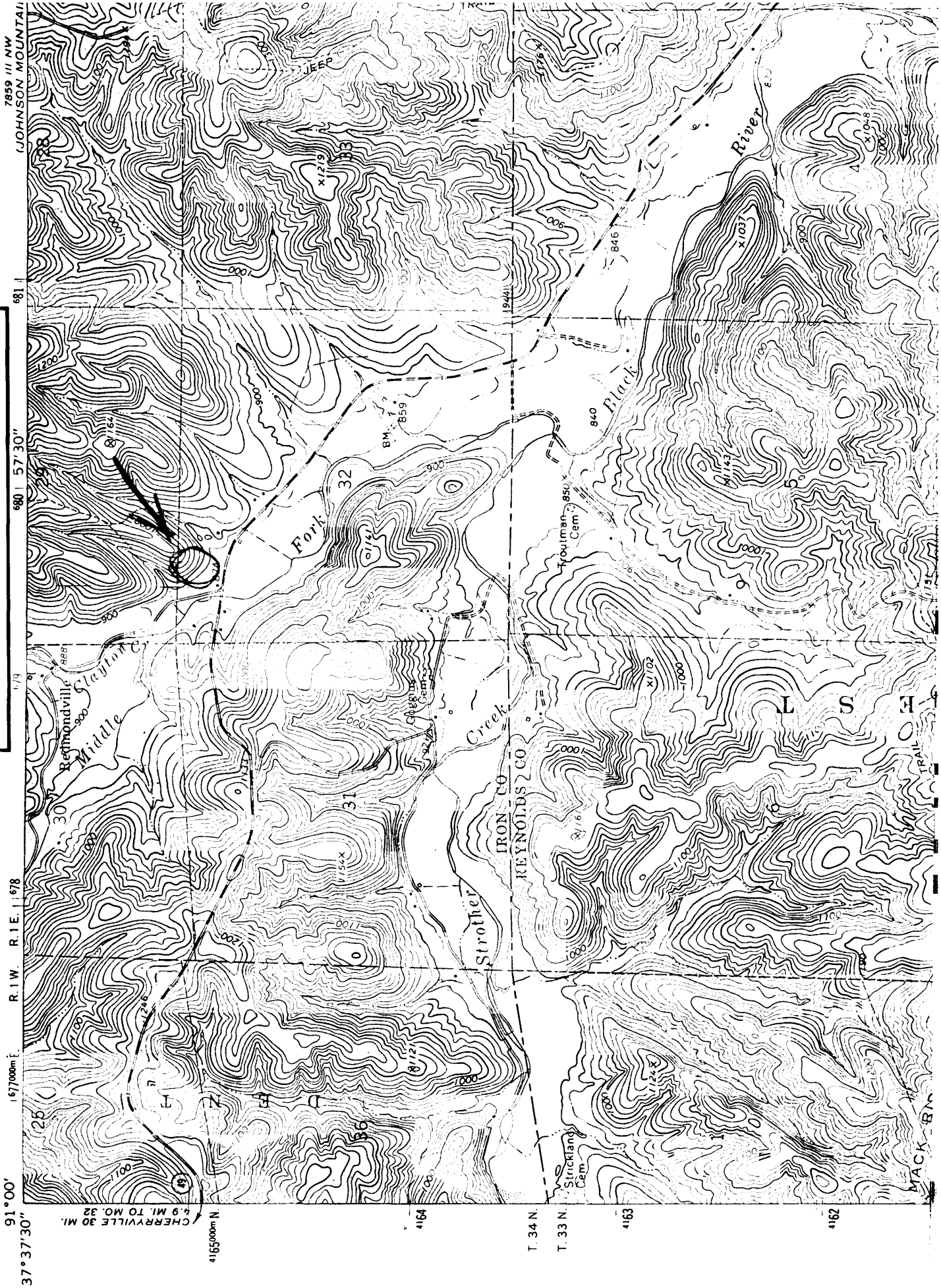


7759 II NE  
(VIBURNUM EAST)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Leo Journagan Construction Company, Inc.  
Black Site, Iron County Missouri  
Permit #287

Injpector  
1996 Permit



7859 III NW  
(JOHNSON MOUNTAIN)



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

**SITE INFORMATION FORM**

Revised 7/31/96

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER Eudora Site #17		PERMIT NUMBER 287
COMPANY NAME Leo Jourmagan Construction Company, Inc.		
COUNTY Polk	1/4 SECTION NW	SECTION 35
TOWNSHIP 32N	RANGE 24W	ACRES 23
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)		
MINERAL COMMODITY Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) Billy G. Hayter		
ADDRESS 3649 S. Broadway Av.		
CITY Springfield	STATE	ZIP CODE 65807
SOURCE OF RIGHT TO MINE (CHECK ONE)  <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT Apr-95
		<input checked="" type="checkbox"/> LEASE  <input type="checkbox"/> VERBAL AGREEMENT

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) Billy G. Hayter		
ADDRESS 3649 S. Broadway Av.		
CITY Springfield	STATE Missouri	ZIP CODE 65807
SOURCE OF RIGHT TO MINE (CHECK ONE)  <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT Apr-95
		<input checked="" type="checkbox"/> LEASE  <input type="checkbox"/> VERBAL AGREEMENT

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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MISSOURI LAND  
RECLAMATION COMMISSION

file

Revised 07/31/96

Permit #287

Missouri Department Of Natural Resources

Land Reclamation Program

**Mine Plan**

Eudora

P.O. Box 176

Jefferson City, MO 65102

☐ Short Term, For One Permit Year

☒ Long Term, For Period Through Date: 31-Jul-07

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Equal amounts of unimproved pasture and hardwood forest.

**Soil and Topography:**

**Blueye Series, 25%:** Very fine, mixed, mesic Typic Argiudoll, 7 percent slope.

**A Horizon:** 10 inches, gravelly silt loam, 30% fragments.

**B Horizon:** 13 inches, gravelly clay, 30% fragments.

**Moko Series, 25%:** Loamy-skeletal, mixed, mesic Lithic Hapludoll, 20 percent slope.

**A Horizon:** 7 inches, very gravelly silt loam, 45% fragments.

**B Horizon:** 5 inches, extremely flaggy silt loam, 60% fragments.

**Goss Series, 50%:** Clayey-skeletal, mixed, mesic Typic Paleudults, 20 percent slope.

**A Horizon:** 4 inches, gravelly silt loam, 25% fragments.

**Eluvial zone:** 12 inches, gravelly silt loam, 60% fragments.

**B Horizon:** 44 inches, very cobbly clay loam, 40% fragments.

**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting

8 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may combine the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

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Page 1 of 5

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**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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MISSOURI LAND  
RECLAMATION COMMISSION

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use <b>Temporary Cover</b>	Seeding Or Planting Time <b>As Needed</b>
---------------------------------	---	--

Describe Methods and Equipment to be Used for Seeding or Planting

To be used on areas that will be disturbed repeatedly during the life of the mine.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Brome grass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use <b>All land uses except impoundments</b>	Seeding Or Planting Time <b>Fall, Spring &amp; Frost</b>
---------------------------------	---	---

Describe Methods and Equipment to be Used for Seeding or Planting

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown vetch	8		
Smooth Brome grass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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RECLAMATION COMMISSION

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading**

10 CSR 40-10.050(10)(A)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed**

Estimated acreage of each land use below, after reclamation

Estimated Acres:

Wildlife (forest or other habitat with livestock excluded)

23

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water Impoundments (for wildlife, agricultural, or development)

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Eudora  
site #17**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

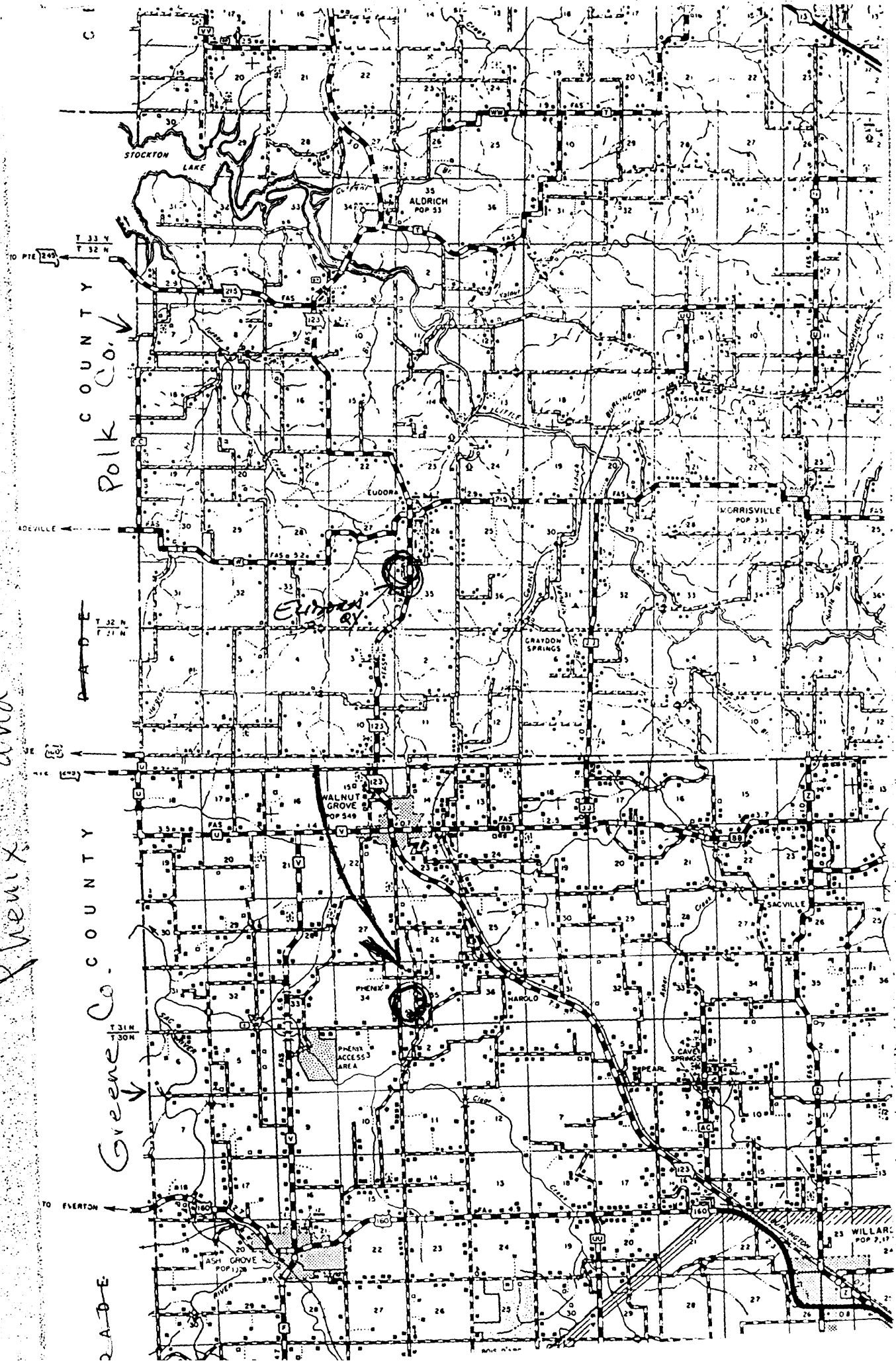
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RECLAMATION COMMISSION

Signature of Applicant <i>Russell Crawley</i>		Title Environmental Geologist	Date July 31, 1996
Notary Public Embosser Seal	State Missouri	County (Or City of St. Louis) Greene	
	Subscribed and Sworn Before me, This 31 Day Of July 1996		Use Rubber Stamp Below
	Notary Public Signature <i>Nina I. Craighead</i>	My Commission Expires 11-4-99	<b>NINA I CRAIGHEAD</b> <b>NOTARY PUBLIC STATE OF MISSOURI</b> <b>GREENE COUNTY</b> <b>MY COMMISSION EXP NOV 4, 1999</b>
	Notary Public Name (Typed or Printed) Nina I. Craighead		
Approved By (Director's Representative) <i>Kenna R. McNamee</i>		Date Approved 11-22-96	Permit Number 0287

5/95

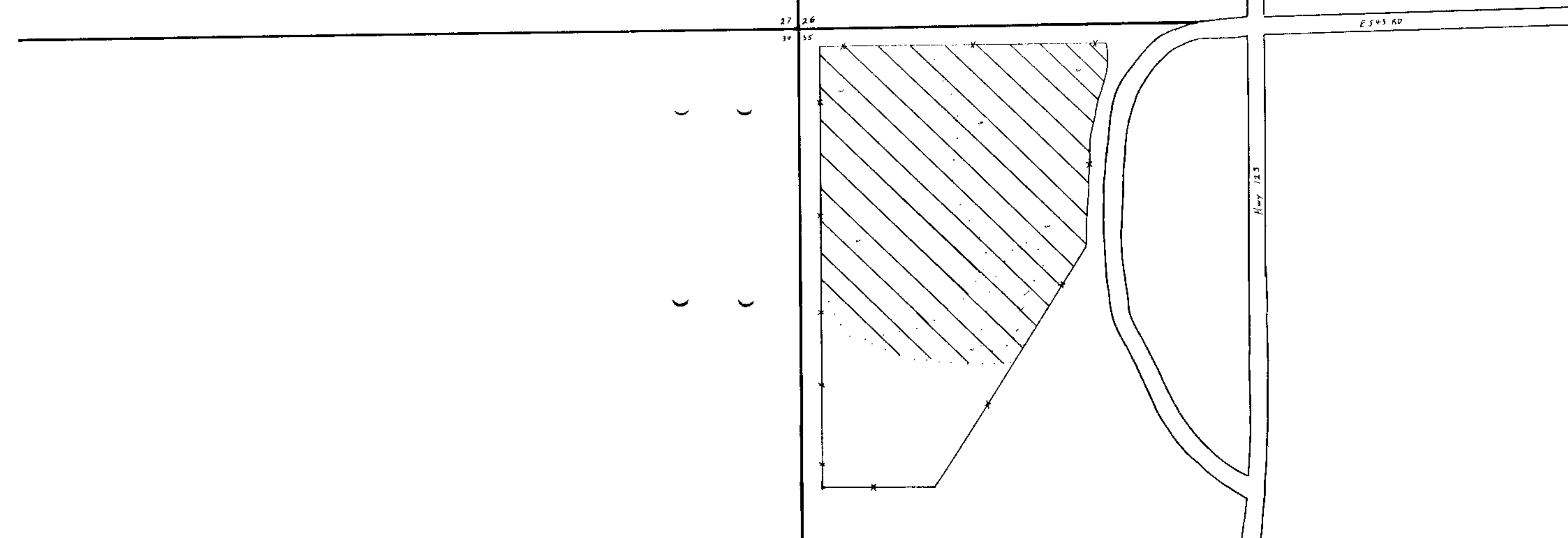
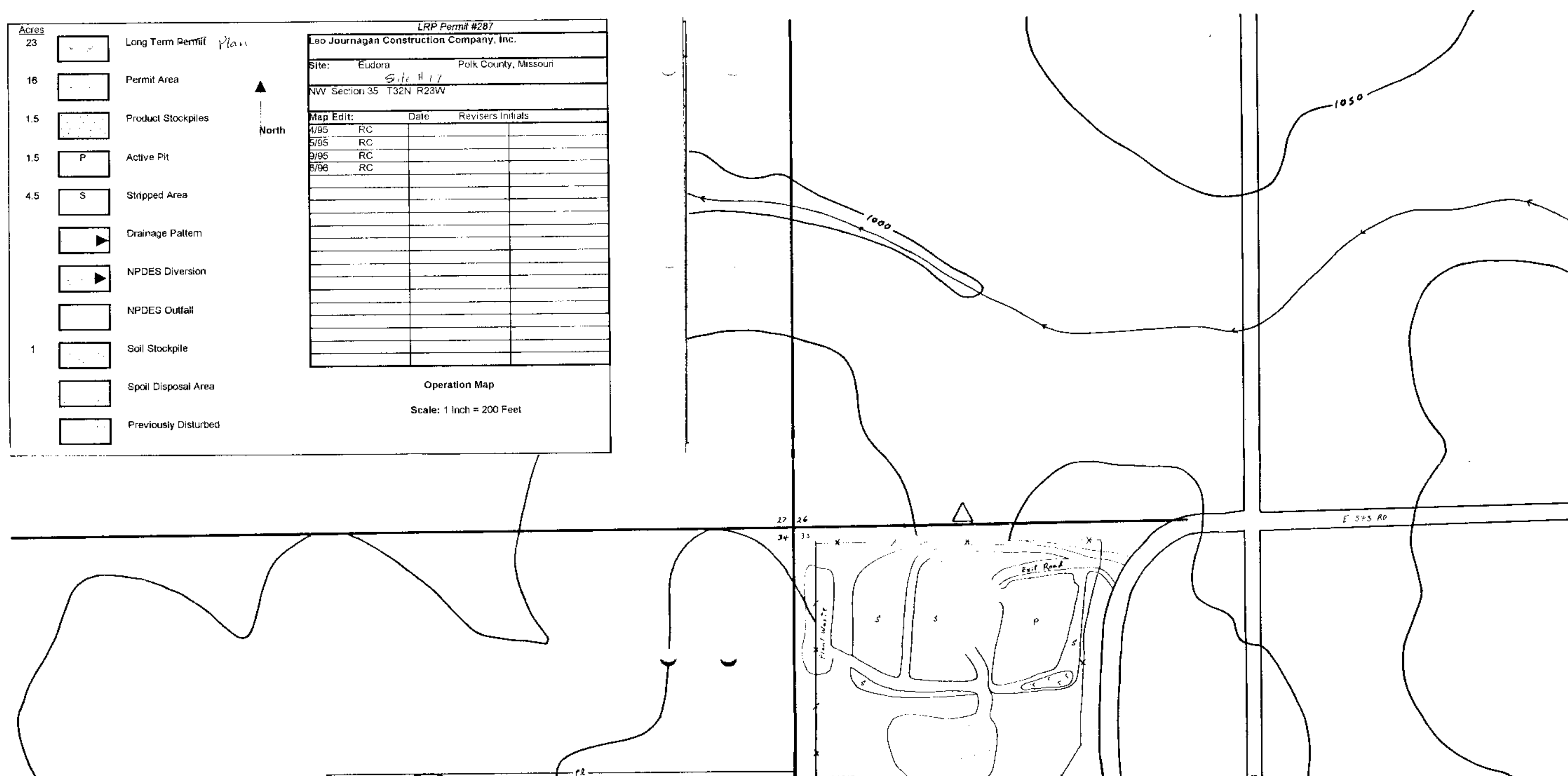
#287

Journagan's  
Phoenix and  
Eudora Quarries





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RECLAMATION COMMISSION

[illegible]

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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

Revised 7/22/96

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

PERMIT NUMBER

Gainesville

Site #1

287

COMPANY NAME

Leo Jourmagan Construction Company, Inc.

COUNTY

1/4 SECTION

SECTION

Ozark

NW NW ; NE NE

15 ; 16

TOWNSHIP

RANGE

ACRES

22N

14W

24; 36

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

MINERAL COMMODITY

ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

Limestone

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Leo Jourmagan Construction Company, Inc.

ADDRESS

3003 E. Chestnut Suite 1200

CITY

STATE

ZIP CODE

Springfield

Missouri

65804

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☐ LEASE

Jun-05

☒ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Leo Jourmagan Construction Company, Inc.

ADDRESS

3003 E. Chestnut Suite 1200

CITY

STATE

ZIP CODE

Springfield

Missouri

65804

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☐ LEASE

Jun-05

☒ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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MISSOURI LAND  
RECLAMATION COMMISSION



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**MINE PLAN**

P.O. BOX 176  
JEFFERSON CITY, MO 65102

file  
copy

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE:

7-31-2007

Gainesville  
Quarry Site 7

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

This site is approximately 73 acres m.o.l. Five acres is currently permitted. There is about 8-10 acres of current industrial area operated by another corporation. The area has no topsoil to speak of. Topsoil is rocky throughout the site. The topography is hilly and sparsely covered by cedars. A highway forms the south boundary.

**OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.**

**A. TOPSOIL**

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

Less than 1 INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Dozer will be used to remove cedar and other trees. Topsoil will be removed with sufficient amount of overburden to maintain a nominal 12" thickness for replacement. Topsoil removal will remain a minimum of 20' ahead of pit excavation.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

Scrapers and haul trucks will be used to remove and store topsoil in segregated berms. The slopes of the temporary berms will be shaped and the stockpile seeded to control erosion.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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RECLAMATION COMMISSION

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Brome grass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Brome grass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		
Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring	

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**B. Grading**Describe Proposed Reclaimed Topography, Including Slopes

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Act.**Grading

10 CSR 40-10.050(10)(A)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Replacement of Topsoil

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Revegetation

Initial revegetation will occur during the first year after grading and soil replacement.

Average Depth of Replaced Topsoil (Inches)

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water Impoundments (for wildlife, agricultural, or development)

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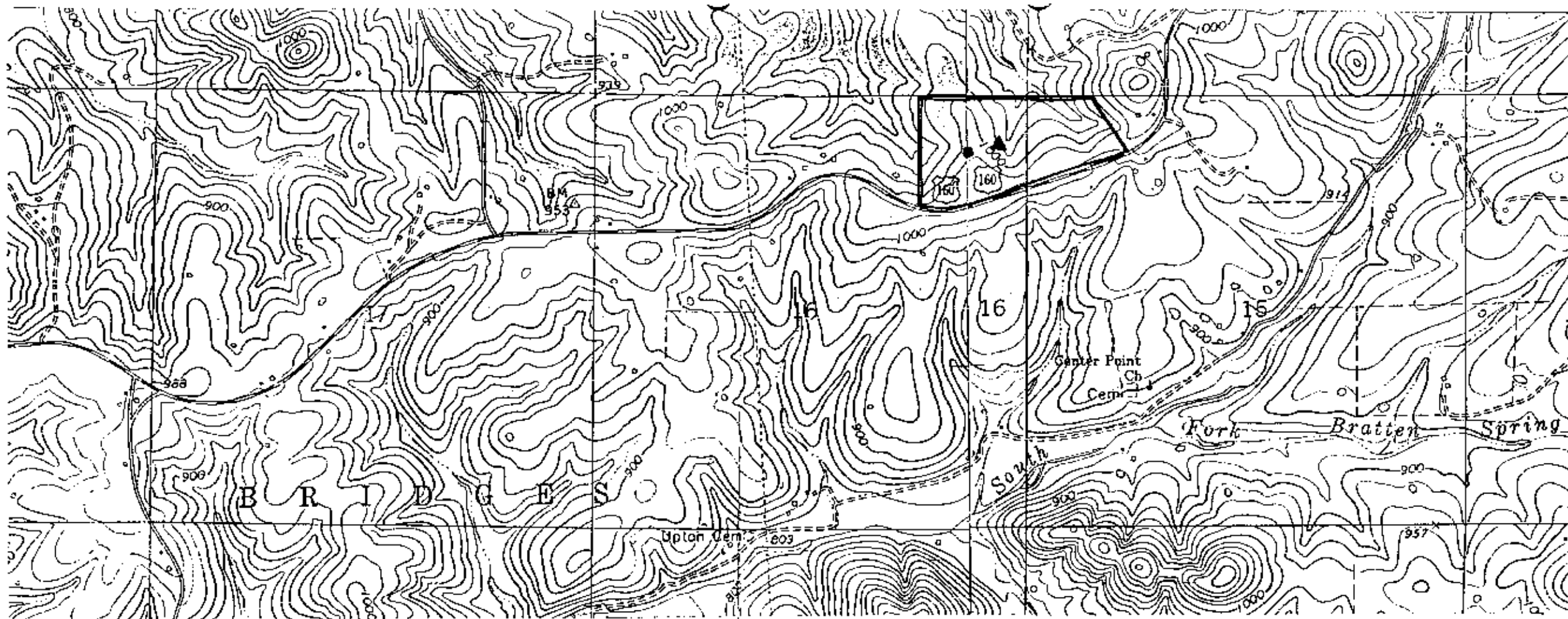
**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowners for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Leo Journagan Construction Company  
Gainesville Quarry  
Permit 287

Signature of Applicant <i>Russell Cramley</i>		Title Environmental Geologist	Date October 1, 1996
Notary Public Embosser Seal	State Missouri		County (Or City of St. Louis) Greene
	Subscribed and Sworn Before me, This 01 Day Of October 1996		Use Rubber Stamp Below
	Notary Public Signature <i>Nina I. Craighead</i>	My Commission Expires 11-4-99	NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) Nina I. Craighead		
Approved By (Director's Representative) <i>Edward R. McNamee</i>		Date Approved 11-2-96	Permit Number 0287





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MAY - 5 1995  
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RECLAMATION CO.

LEO JOURNAGAN CONSTRUCTION COMPANY, INC.

Gainesville Site #7

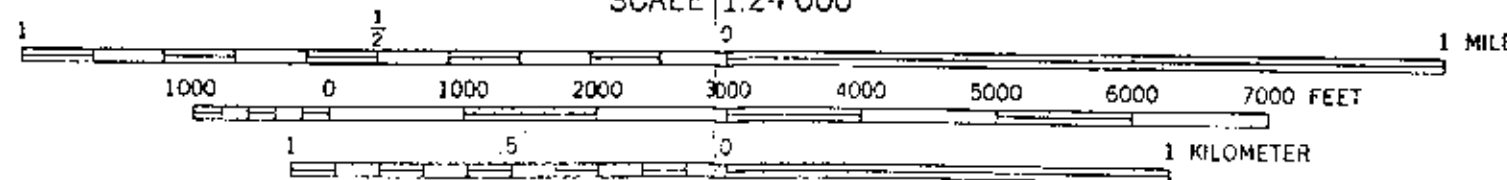
○ Asphalt Plant Location  
650' from property line

3.5 miles west of Gainesville, MO on Hwy 160

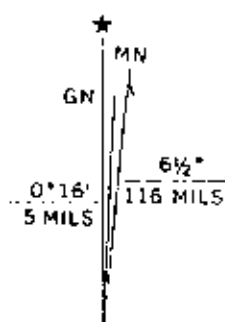
△ Crushing Plant Location  
600' from property line

NW NW SECTION 15 TOWNSHIP 22N RANGE 14W  
NE NE SECTION 16 TOWNSHIP 22N RANGE 14W

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1968 MAGNETIC NORTH  
DECLINATION AT CENTER OF SHEET

file  
copy



QUADRANGLE LOCATION



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

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MAY 18 1998

To be completed for each separate area of disturbance associated with mining operations.			MISSOURI LAND RECLAMATION COMMISSION
SITE NAME OR NUMBER  Hilda		PERMIT NUMBER  287	
COMPANY NAME  Leo Jourmagan Construction Company, Inc.			
COUNTY  Taney	1/4 SECTION  SE	SECTION  25	
TOWNSHIP  23N	RANGE  19W	ACRES  90	
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)			
MINERAL COMMODITY  Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)	

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)  Jack Cole		
ADDRESS		
CITY  Forsyth	STATE  Missouri	ZIP CODE  65653
SOURCE OF RIGHT TO MINE (CHECK ONE):  <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT  May-98
<input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)  Jack Cole		
ADDRESS		
CITY  Forsyth	STATE  Missouri	ZIP CODE  65653
SOURCE OF RIGHT TO MINE (CHECK ONE):  <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT  May-98
<input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		
NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.		

**Mine Plan**

Hilda

☐ Short Term, For One Permit Year

☒ Long Term, For Period Through Date: **31-Jul-07**

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Eastern Redcedar and hardwood forest.

**Soil and Topography:**

Knobby-Rock outcrop complex: Loamy Skeletal, mixed, mesic Lithic Hapludolls, 3 to 15 percent slope.

*A Horizon*: 0-3 inches, black very flaggy fine sandy loam, 40 percent fragments.

*B Horizon*: 3-8 inches, black very flaggy fine sandy loam, 30 percent fragments.

*Bedrock*: hard dolomite

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**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
\_\_\_\_\_ 2 \_\_\_\_\_ Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may be a combination of the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved in the location reserved for topsoil. All other overburden materials will be utilized to construct a safety berm along the property line.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or used to construce perimeter safety berms. The disposal areas will be active for the entire life of the mine.

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MISSOURI LAND  
RECLAMATION COMMISSION

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐ ☒ Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐ ☒ Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐ ☒ Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

## Reclamation Plan-10 CSR 40-10.02(2)(D)2.

**A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

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MISSOURI LAND  
RECLAMATION COMMISSION

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Brome grass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Brome grass	12		
Orchard grass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.02(2)(D)2.**
**A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

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Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

This site does not have an average of 12 inches of soil material available. However, all vegetated areas will have 12 inches of soil replaced. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less. Typically development landuses do not require large percentages of the area to be revegetated.

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to build safety berms, create natural areas or to reduce the depth of the pit floor.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material (spoil). At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**Grading****10 CSR 40-10.050(10)(A)&(C)**

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas that are no longer needed as a part of the active operation of the site.

**Replacement of Topsoil****10 CSR 40-10.050(10)(A)**

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site. Areas receiving soil replacement will have soil 12 inches thick.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

90

Water Impoundments (for wildlife, agricultural, or development)

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Page 4 of 5

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By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

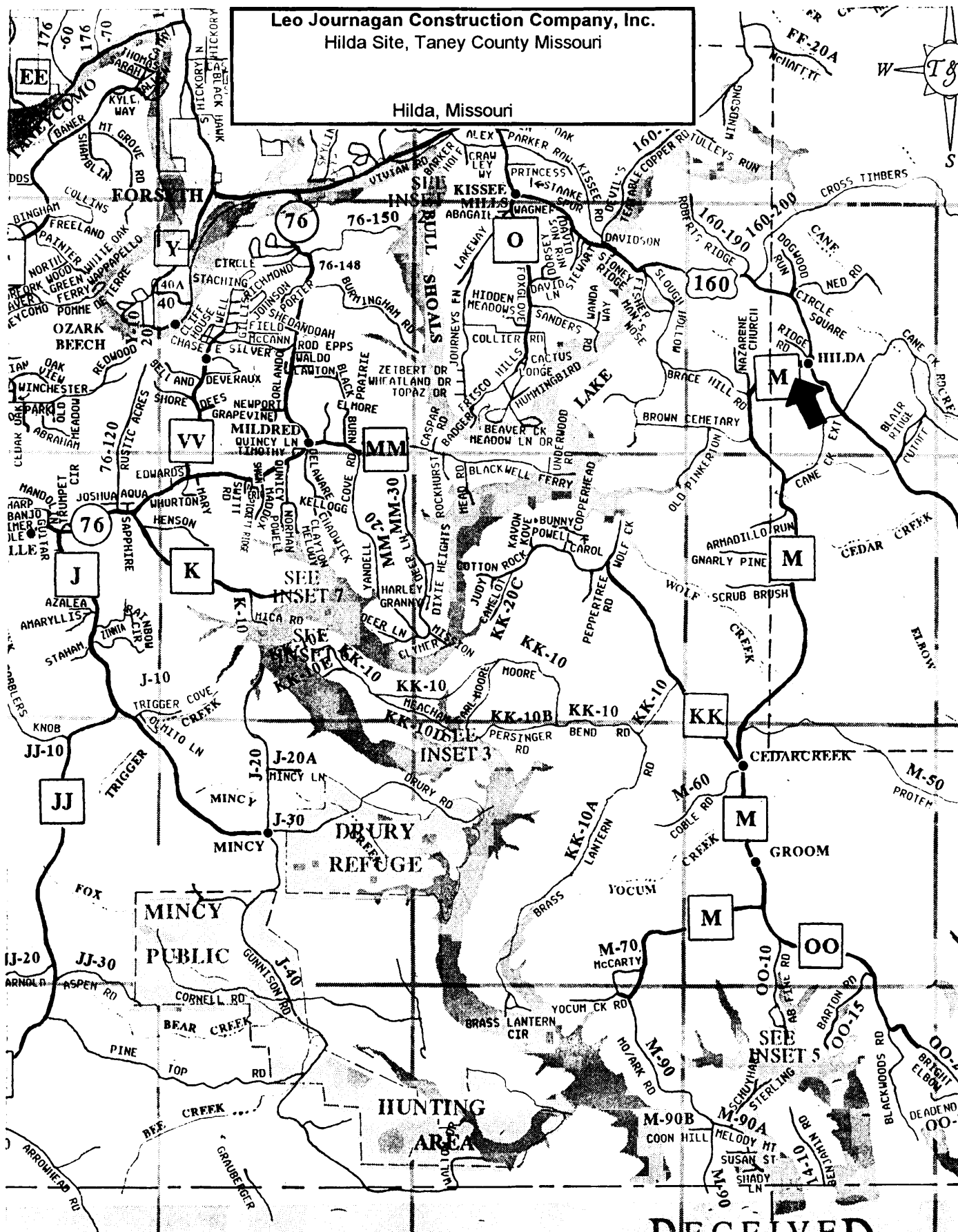
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MAY 18 1998

MISSOURI LAND  
RECLAMATION COMMISSION

Signature of Applicant <i>Russell Crawley</i>		Title <i>Environmental Geologist</i>	Date <i>May 13, 1998</i>
Notary Public Embosser Seal	State <i>Missouri</i>	County (Or City of St. Louis) <i>Greene</i>	
	Subscribed and Sworn Before me, This <i>13<sup>th</sup></i> Day Of <i>May</i> 19 <i>98</i>		Use Rubber Stamp Below  NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Signature <i>Nina I. Craighead</i>	My Commission Expires <i>11-4-99</i>	
	Notary Public Name (Typed or Printed) <i>Nina I. Craighead</i>		
Approved By (Director's Representative) <i>Christopher Schmitt</i>		Date Approved <i>7/22/98</i>	Permit Number <i>0287</i>

Leo Journagan Construction Company, Inc.  
Hilda Site, Taney County Missouri

Hilda, Missouri



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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER 4		PERMIT NUMBER 287	
COMPANY NAME Leo Journagan Construction Company, Inc.			
COUNTY Taney	1/4 SECTION NE, SW	SECTION 17 & 20	
TOWNSHIP 22N	RANGE 21W	ACRES 116	
RIVER OR STREAM NAME (FOR IN-STREAM ACRES) NA			
MINERAL COMMODITY Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES) NA	

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) Leo Journagan Construction Company, Inc.		
ADDRESS 3003 East Chestnut Expressway, Suite 1200		
CITY Springfield	STATE Missouri	ZIP CODE 65802
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE):		DATE OF AGREEMENT NA
		<input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) Leo Journagan Construction Company, Inc.		
ADDRESS 3003 East Chestnut Expressway, Suite 1200		
CITY Springfield	STATE Missouri	ZIP CODE 65802
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE):		DATE OF AGREEMENT NA
		<input type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT

**NOTE:** Each site must be shown on a map and be included in a public notice and an approved mine plan.

## Hollister North

Page 1 of 5

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

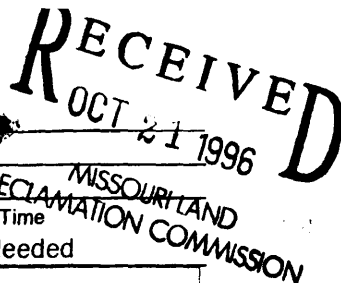
☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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**A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**B. Grading**

## Describe Proposed Reclaimed Topography, Including Slopes

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities**

## Grading

10 CSR 40-10.050(10)(A)&(C)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

## Replacement of Topsoil

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

## Revegetation

Initial revegetation will occur during the first year after grading and soil replacement.

## Average Depth of Replaced Topsoil (Inches)

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water Impoundments (for wildlife, agricultural, or development)

116  
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**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

**RECEIVED**  
 JUL 22 1996  
 MISSOURI LAND  
 RECLAMATION COMMISSION

Signature of Applicant <i>Russell Crawley</i>		Title Environmental Geologist		Date <i>7/18/96</i>	
Notary Public Embosser Seal	State <i>Missouri</i>	County (Or City of St. Louis) <i>Greene</i>			
	Subscribed and Sworn Before me, This <i>18</i> Day Of <i>July</i> 19 <i>96</i>	Use Rubber Stamp Below			
	Notary Public Signature <i>Nina I Craighead</i>	My Commission Expires <i>11-4-99</i>			
	Notary Public Name (Typed or Printed) <i>Nina I Craighead</i>				
Approved By (Director's Representative) <i>Donna R. Menon</i>			Date Approved <i>11-22-96</i>		Permit Number <i>0287</i>



Leo Journagan Construction Company, Inc.  
Hollister North Site, Taney County Missouri  
586 Quarry Road  
Hollister, Missouri 65672

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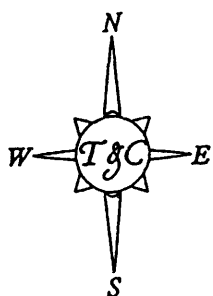
HOLLISTER

**The Great Passion Play™**

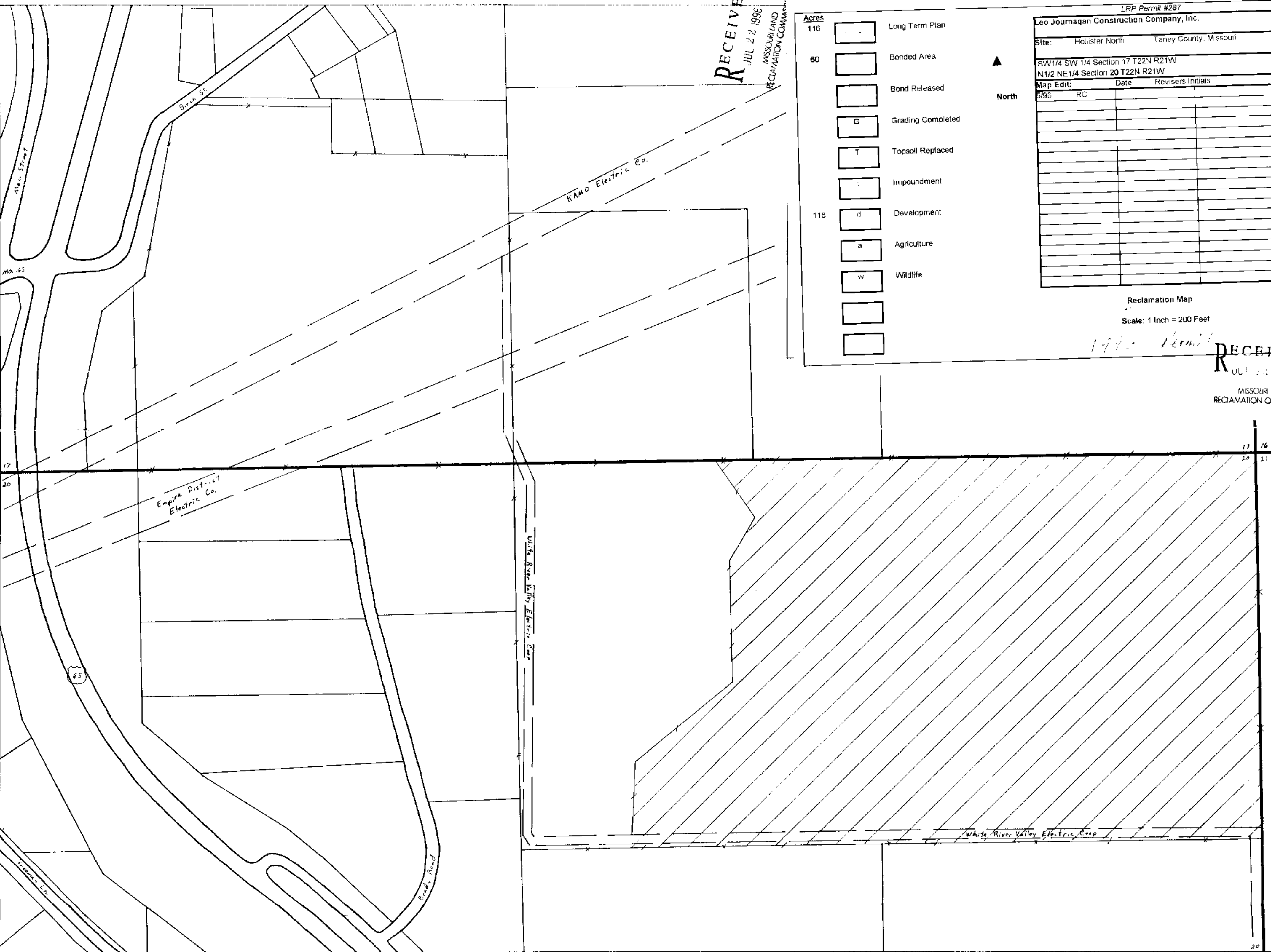
EUREKA SPRINGS, ARK

FOR RESERVATION  
**1-800-882-PL**  
DAYTIME TOURS:  
New Holy Land/Tabernacle T

For Information 501-253  
Passion Play Rd & Hwy  
48 Scenic Miles From Br



File copy



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

**SITE INFORMATION FORM**

Revised 7/20/99

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER		PERMIT NUMBER
Hollister South		287
COMPANY NAME		
Leo Journagan Construction Company, Inc.		
COUNTY	1/4 SECTION	SECTION
Taney	N1/2 NE	31
TOWNSHIP	RANGE	ACRES
22N	21W	80
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)		
MINERAL COMMODITY		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)
Limestone		

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)		
Everett McFarland		
ADDRESS		
HCR 1 Box 219		
CITY	STATE	ZIP CODE
Hollister	Missouri	65672
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> LEASE		Sep-94
<input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE): _____		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)		
Everett McFarland		
ADDRESS		
HCR 1 Box 219		
CITY	STATE	ZIP CODE
Hollister	Missouri	65672
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input checked="" type="checkbox"/> LEASE		Sep-94
<input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE): _____		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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RECLAMATION COMMISSION

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

Revised 7/20/99

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER		PERMIT NUMBER	
Hollister South		287	
COMPANY NAME			
Leo Journagan Construction Company, Inc.			
COUNTY	1/4 SECTION		
Taney	SW & SE	29	
TOWNSHIP	RANGE	ACRES	
22N	21W	195	
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)			
MINERAL COMMODITY		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)	
Limestone			

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Journagan Construction Company, Inc.		
ADDRESS		
3003 E. Chestnut Suite 1200		
CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Journagan Construction Company, Inc.		
ADDRESS		
3003 E. Chestnut Suite 1200		
CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

**SITE INFORMATION FORM**

Revised 7/20/99

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER		PERMIT NUMBER
Hollister South		287
COMPANY NAME		
Leo Journagan Construction Company, Inc.		
COUNTY	1/4 SECTION	SECTION
Taney	SE	30
TOWNSHIP	RANGE	ACRES
22N	21W	80
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)		
MINERAL COMMODITY		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)
Limestone		

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Journagan Construction Company, Inc.		
ADDRESS		
3003 E. Chestnut Suite 1200		
CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Journagan Construction Company, Inc.		
ADDRESS		
3003 E. Chestnut Suite 1200		
CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

Revised 7/20/99

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER		PERMIT NUMBER
Hollister South		287
COMPANY NAME		
Leo Journagan Construction Company, Inc.		
COUNTY	1/4 SECTION	SECTION
Taney	NW NW	32
TOWNSHIP	RANGE	ACRES
22N	21W	40
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)		
MINERAL COMMODITY		ESTIMATED TONS/YEAR
Limestone		

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Leo Journagan Construction Company, Inc.

ADDRESS

3003 E. Chestnut Suite 1200

CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Leo Journagan Construction Company, Inc.

ADDRESS

3003 E. Chestnut Suite 1200

CITY	STATE	ZIP CODE
Springfield	Missouri	65804
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		Jan-94
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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**Mine Plan**

☐ Short Term, For One Permit Year  
☒ Long Term, For Period Through Date: 31-Jul-07

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Equal amounts of unimproved pasture and hardwood forest.

**Soil and Topography:**

Gasconade-Gatewood and Knobby Rock outcrop complexes, 193 Ac.:

15-50 percent slope, Depth to bedrock 9-19 inches.

A Horizon : 5-8 inches, Gravelly loam to Very flaggy clay loam, 15-75% fragments.

B Horizon : 4-11 inches, Very gravelly loam to Very flaggy silt loam, 15-70% fragments.

Hailey and Clarksville Soils, 162 Ac.:

10-50 percent slope, Depth to bedrock >60 inches.

A Horizon : 12-13 inches, Very gravelly silt loam, 10-30% fragments.

B Horizon : >30 inches, Very gravelly silty clay loam to extremely cobbly loam, 20-80% fragments.

Gatewood-Ocie complex, 40Ac.:

10-35 percent slope, Depth to bedrock 21 inches.

A Horizon : 9 inches, Gravelly silt loam, 5-15% fragments.

B Horizon : 12 inches, Gravelly silty clay, 0-10% fragments.

**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
10 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may combine the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil.

Spoil will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

**Yes    No**☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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MISSOURI LAND  
RECLAMATION COMMISSION

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

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Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #3

**C**

Purpose Or Land Use

All Land uses except impoundments

Seeding Or Planting Time

Winter and Spring

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4

**D**

Purpose Or Land Use

All land uses except impoundments

Seeding Or Planting Time

Spring

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**B. Grading**

## Describe Proposed Reclaimed Topography, Including Slopes

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches that are required to have soil replacement.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will consist of a surface layer of at least 24 inches of root growth material or will not be suseptable to erosion. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**Grading**

## 10 CSR 40-10.050(10)(A)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

## 10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

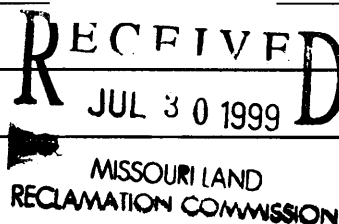
360

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

35

Water Impoundments (for wildlife, agricultural, or development)



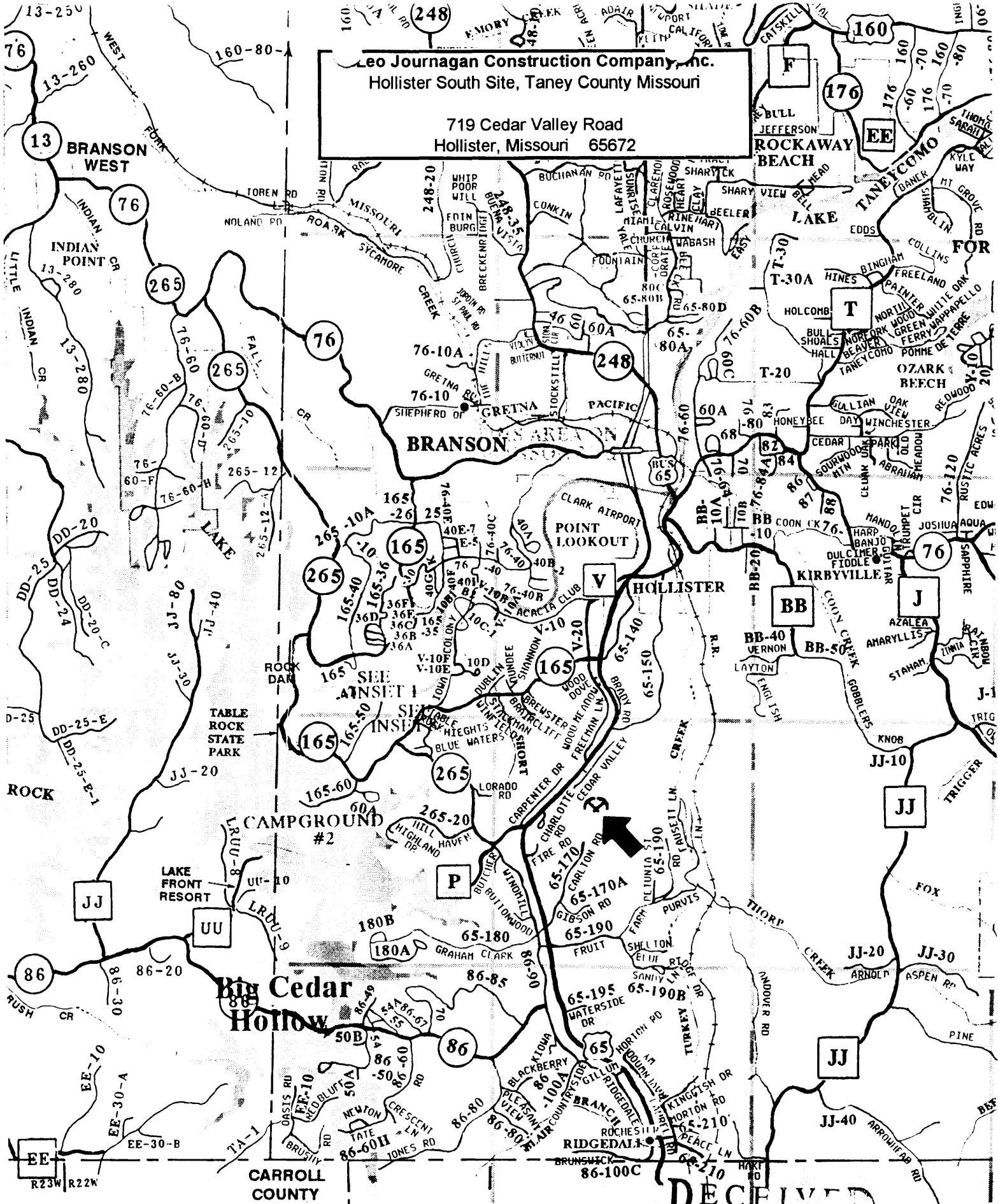
By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Signature of Applicant <i>Russell Crawley</i>		Title Geologist	Date <i>July 27, 1999</i>
Notary Public Embosser Seal	State <i>Missouri</i>	County (Or City of St. Louis) <i>Greene</i>	
	Subscribed and Sworn Before me, This <i>27<sup>th</sup></i> Day Of <i>July</i> 19 <i>99</i>		Use Rubber Stamp Below
	Notary Public Signature <i>Nina I Craighead</i>	My Commission Expires <i>11-4-99</i>	NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) <i>Nina I Craighead</i>		
Approved By (Director's Representative) <i>Brett Hays</i>		Date Approved <i>9-7-99</i>	Permit Number <i>287</i>

RECEIVED  
JUL 30 1999  
MISSOURI LAND  
RECLAMATION COMMISSION

Leo Journagan Construction Company, Inc.  
Hollister South Site, Taney County Missouri  
719 Cedar Valley Road  
Hollister, Missouri 65672

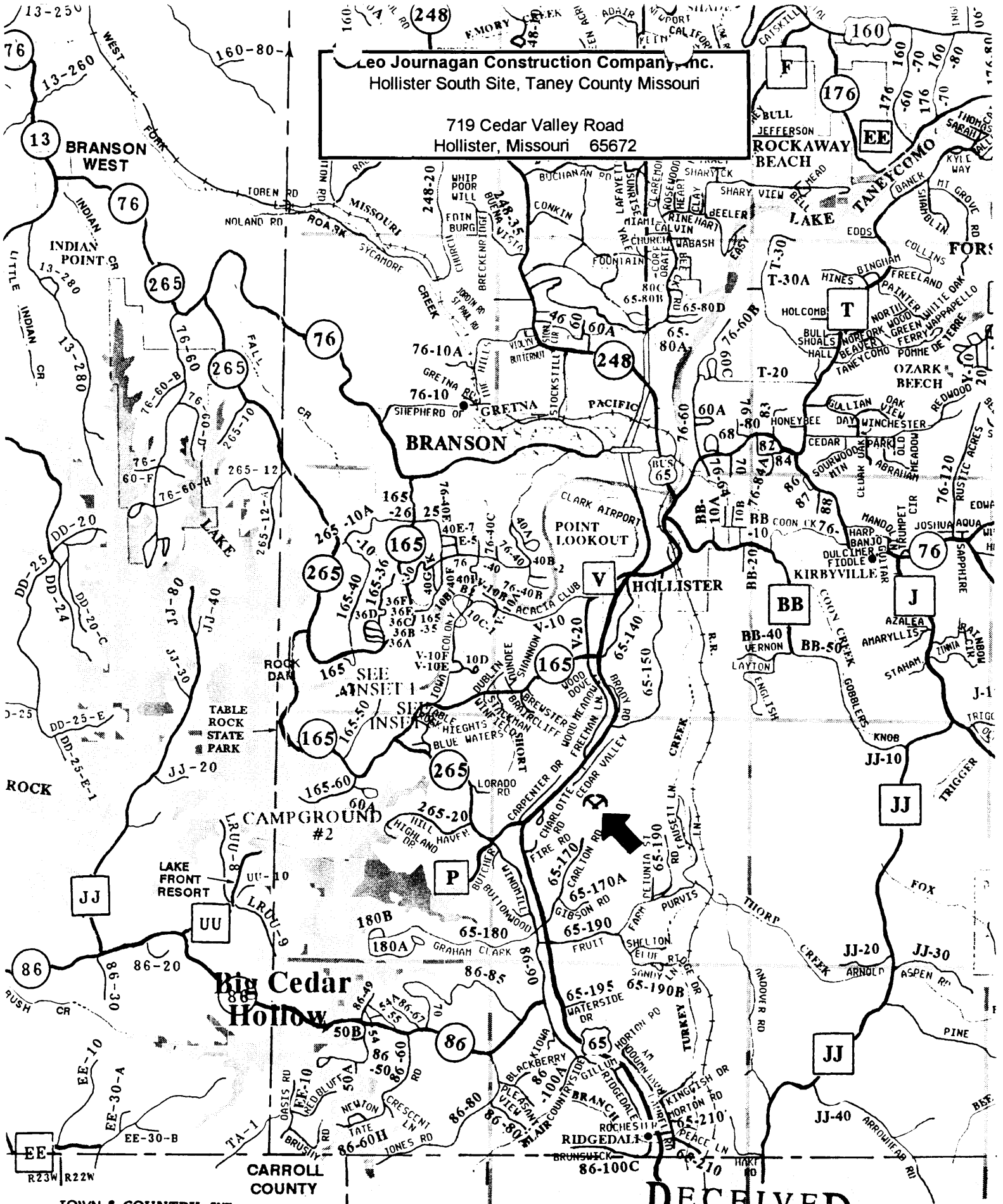


OVE TOWN & COUNTRY ENT.  
ALL RIGHTS RESERVED

RECEIVED  
JUL 30 1963

MISSOURI LAND  
RECLAMATION COMMISSION

Leo Journagan Construction Company, Inc.  
Hollister South Site, Taney County Missouri  
719 Cedar Valley Road  
Hollister, Missouri 65672



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ALL RIGHTS RESERVED

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MISSOURI LAND  
RECLAMATION COMMISSION





MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
SITE INFORMATION FORM *1 of 2*

Revised 7/31/96

*FILE  
Copies*

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

Hwy 376

*Site #14*

PERMIT NUMBER

287

COMPANY NAME

Leo Joumagan Construction Company, Inc.

COUNTY

Taney

1/4 SECTION

SE SW, NW

SECTION

34, 3

TOWNSHIP

23N, 22N

RANGE

22W

ACRES

5, 24

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

*29*

MINERAL COMMODITY

Limestone

ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Leon Kirkland c/o David Cushman

ADDRESS

P.O. Box 250

CITY

Branson

STATE

Missouri

ZIP CODE

65615

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☒ LEASE

Mar-95

☐ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Leon Kirkland c/o David Cushman

ADDRESS

P.O. Box 250

CITY

Branson

STATE

Missouri

ZIP CODE

65615

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☒ LEASE

Mar-95

☐ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

MO 780-1036 (12-91)

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OCT 04 1996

RECLAMATION COMMISSION

file

## MISSOURI DEPARTMENT OF NATURAL RESOURCES

## LAND RECLAMATION COMMISSION

## SITE INFORMATION FORM #2 of 2

Revised 7/31/96

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

Hwy 376

Site #14

PERMIT NUMBER

287

COMPANY NAME

Leo Jouragan Construction Company, Inc.

COUNTY

1/4 SECTION

SECTION

Taney

SW SW

34

TOWNSHIP

RANGE

ACRES

23N

22W

34

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

MINERAL COMMODITY

Limestone

ESTIMATED TONS/YEAR (FOR GRAVEL)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

David Cushmann

ADDRESS

P.O. Box 250

CITY

STATE

ZIP CODE

Branson

Missouri

56615

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED☒ LEASE

Mar-95

☐ WARRANTY DEED☐ VERBAL AGREEMENT☐ OTHER(DESCRIBE):

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

David Cushmann

ADDRESS

P.O. Box 250

CITY

STATE

ZIP CODE

Branson

Missouri

56615

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED☒ LEASE

Mar-95

☐ WARRANTY DEED☐ VERBAL AGREEMENT☐ OTHER(DESCRIBE):

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
MINE PLAN

P.O. BOX 176  
JEFFERSON CITY, MISSOURI 64101

MISSOURI LAND  
RECLAMATION COMMISSION

TYPE OF PLAN (CHECK ONE):

☐ SHORT TERM, FOR ONE PERMIT YEAR

☒ LONG TERM, FOR PERIOD THROUGH DATE: July 31, 2005

Hwy 376; #14

DESCRIPTION OF SITE PRIOR TO LAND RECLAMATION COMMISSION PERMITTING (BY APPLICANT OR PRIOR OPERATOR), INCLUDING SOIL, VEGETATION AND TOPOGRAPHY.

Approximately 20 acres were disturbed to supply barrow material for road construction previous to permitting.  
The remainder is mostly identified as 18F, Gasconade-Gatewood-Rock outcrop complex, 15 to 50 percent slopes.  
60% Gasconade: Depth to bedrock 10 to 20 inches  
0-8" very flaggy clay loam  
20% Gatewood: Depth to bedrock 32 inches  
0-10" very gravelly silt loam  
20% Rock Outcrop: areas of exposed dolomite bedrock

Clayey-skeletal, mesic Lithic Hapludoll

OPERATION PLAN - 10 CSR 40-10.020(2)(D)1.

A. TOPSOIL

AVERAGE DEPTH OF TOPSOIL, PRIOR TO LAND RECLAMATION COMMISSION PERMITTING

9" INCHES

IS TOPSOIL TO BE SOLD OR DISCARDED OFFSITE?

☐ YES OR ☒ NO

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL REMOVAL

Scrapers, dozers, and dump trucks depending on the physical limitations of the site.

DESCRIBE METHODS AND EQUIPMENT USED FOR TOPSOIL STORAGE AND PROTECTION

What little topsoil that is of sufficient quality to allow salvage (thickness and percent rock fragments) will be stockpiled at the locations shown on the map to be utilized later. The stockpiles will be seeded with fescue or another acceptable grass species for temporary cover.  
Soil will typically be transported by scrapers to the stockpile locations.

**B. SPOIL**

DESCRIBE METHODS AND LOCATION OF SPOIL PLACEMENT AND DISPOSAL

All spoil will be used to establish a 1-2% slope of the pit floor. The development of the final grade will be contemporaneous with mining.

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RECLAMATION COMMISSION

**C. ACID MATERIALS**

DESCRIBE METHODS AND EQUIPMENT USED FOR HANDLING ACID MATERIALS (IF NONE IS ANTICIPATED, WRITE "NONE" BELOW)

N/A

**D. PIT INFORMATION (GIVE ALL DIMENSIONS IN FEET)**

DESCRIBE LOCATION AND ORIENTATION OF PIT, IF NOT CLEAR ON SITE MAPS

See map.

YES NO

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right of way, and in no case may the excavation be closer to the right of way than fifty feet or twenty-five feet plus one and one-half (1-½) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line? (NOTE: If the answer is "yes", a safety barrier may be needed.)

## RECLAMATION PLAN - 10 CSR 40-10.020(2)(D)2.

**A. REVEGETATION** (Attach additional sheets, if needed)

REVEGETATION MIX #1

PURPOSE OR LAND USE

Temporary stockpiles

B. SEEDING OR PLANTING TIME

DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Broadcast seeder or hydromulch

Domant seeding:

NOV 1 - MAR 1

Spring:

MAR 15 - APR 30

Fall:

AUG 15 - OCT 15

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

SEEDED SPECIES	POUNDS/ACRE	TREE OR SHRUB SPECIES	STEMS/ACRE
Fescue, orchard grass, brome grass or perennial ryegrass	10		
Annual ryegrass	20		

REVEGETATION MIX #2

PURPOSE OR LAND USE

Commercial

B. SEEDING OR PLANTING TIME

Spring

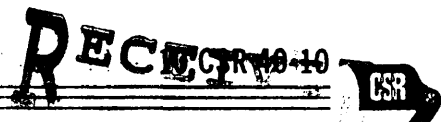
DESCRIBE METHODS AND EQUIPMENT TO BE USED FOR SEEDING OR PLANTING

Acceptable establishment methods for bare rootstock or container woody species.

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients. Mulch will be applied to all slopes exceeding 5:1.

SEEDED SPECIES	POUNDS/ACRE	TREE OR SHRUB SPECIES	STEMS/ACRE
		Leatherleaf viburnum	60
		Honeysuckle	3600
		Winter Creeper	10800

ATTACH ADDITIONAL SHEETS FOR ADDITIONAL SEED MIXES.



**B. GRADING**

DESCRIBE PROPOSED RECLAIMED TOPOGRAPHY, INCLUDING SLOPES

MISSOURI LAND  
RECLAMATION COMMISSION

See B. Spoil on page 2.

Green spaces<sup>c?</sup> within the development will be provided with at least 12" of soil material, due to the extremely poor quality of the soil this will be a mixture of all available root growth material salvaged during mining.

The unconsolidated material above final highwalls will be sloped and planted to seeding mix #2.

**C. DESCRIBE THE GENERAL SEQUENCE AND TIMING OF THE FOLLOWING ACTIVITIES**

GRADING

In accordance with 10 CSR 40-10.050 (10)(A)

REPLACEMENT OF TOPSOIL

In accordance with 10 CSR 40-10.050 (10)(A)

REVEGETATION

In accordance with 10 CSR 40.10.050 (10)(B)

AVERAGE DEPTH OF REPLACED TOPSOIL (INCHES)

12

**D. USE OF LAND WHEN RECLAIMED**

Estimate acreage of each land use below, after reclamation

ESTIMATED ACRES:

Wildlife (forest or other habitat with livestock excluded)

Agricultural (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water impoundments (for wildlife, agricultural, or development)

63


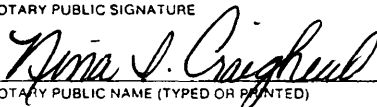
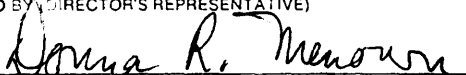
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JAN 18 1995

MISSOURI LAND  
RECLAMATION COMMISSION

By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Sections 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

SIGNATURE OF APPLICANT 		TITLE Vice-President	DATE January 18, 1995
NOTARY PUBLIC EMBOSSEMENT SEAL	STATE Missouri	COUNTY (OR CITY OF ST. LOUIS) Greene	
	SUBSCRIBED AND SWORN BEFORE ME, THIS 18th DAY OF January 19 95		USE RUBBER STAMP IN CLEAR AREA BELOW NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP. NOV. 4, 1995
	NOTARY PUBLIC SIGNATURE 	MY COMMISSION EXPIRES 11-04-95	
	NOTARY PUBLIC NAME (TYPED OR PRINTED) Nina I. Craighead		
APPROVED BY (DIRECTOR'S REPRESENTATIVE) 		DATE APPROVED 7-24-95	PERMIT NUMBER 0287



Site #14  
Hwy. 376 Quarry  
Taney County

Lease Agreement between  
landowner and Journagan Construction  
serves as Consent to Entry for  
LRP(?)

SALE OF MINERAL INTERESTS AND  
TEMPORARY RIGHT OF ENTRY AND TEMPORARY EASEMENT AGREEMENT

THIS AGREEMENT, made and entered into this 30 day of March, 1995, by and between Leo Journagan Construction Company, Inc. ("Contractor"), and David Cushman, Trustee of the David Alan Cushman Revocable Living Trust dated July 10, 1991, ("Cushman"), and Leon Kirkland Trustee of the Leon Kirkland Irrevocable Living Trust dated April 19, 1983, ("Kirkland"), together the "Owners".

WITNESSETH:

WHEREAS, Cushman owns property (the "Cushman Property"), as more particularly described on Exhibit "A" hereof which is incorporated herein by reference as if fully set forth at length and Kirkland owns property (the "Kirkland Property") as is more particularly described on Exhibit "B" which is incorporated herein by reference as if fully set forth at length, (together the "Property"), and Cushman and Kirkland are willing to grant options to purchase the Property as shown in the Purchase Options section set forth herein below, and

WHEREAS, the Contractor desire to conduct commercial quarry and concrete operations on the Quarry Property (hereafter defined) for the purpose of exploring, mining, and removing from such Quarry Property by strip mining process, and crushing limestone deposits and rock into gravel, sand and other products.

NOW, THEREFORE, in consideration of the premises and the mutual covenants and promises contained herein to be faithfully kept and performed by the parties hereto, it is agreed as follows:

1. Grant of Mineral Interest, Right of Entry and Easement. The Contractor is to have the right to the possession of so much of the Quarry Property as is shown by the shaded area (the "Quarry Property") pursuant to the legend on Exhibit "C", the Preliminary Grading Plan for the Cushman/Kirkland Property dated November 15, 1993, revised February 22, 1995, March 10, 1994, incorporated herein by reference as if fully set forth at length herein, as more particularly hereinafter set forth, but only of so much of the surface and interior of said Quarry Property as may be actually required, and only as limited herein, for the safe, expeditious and economical mining, quarrying, and removal of said limestone deposits and rocks, and the crushing of the same into gravel, sand and other products (the "Material") and as may be required for stockpile areas for storage of the Material, and the temporary right, as limited herein, to deposit on and in the above described Quarry Property, waste and refuse from the operations incidental to this use of the Quarry Property. Said possession is to include ground adequate for necessary buildings, machinery, fixtures and roads, at the most convenient locations and grades as limited herein. The Contractor shall have the exclusive right to quarry, to include all practical methods now in use or which may hereafter be used, and the use of improved machinery and fixtures or appliances for said purposes; but shall only have a non-exclusive right to strip the surface or excavate, dig, bore and shaft. Contractor shall not remove any building or farm structure located on the Quarry Property as of the date above, without permission of the Owner. Subject to the terms and conditions set forth herein, and to easements, reservations, restrictions and covenants, if any, of record, the Owners hereby grant to the Contractor, its successors and assigns, a right of entry and an easement in, under, upon, across, over and through the Quarry Property for the purposes of quarrying and preparing to and actually hauling Material and for purposes of constructing a road for such purpose and for the other purposes set forth herein. The rights and obligations and benefits and burdens of the parties hereto shall be binding upon and inure to the benefit of their respective representatives, successors and assigns and shall run with the land. Contractor agrees that all expenses associated with Contractor's rights hereunder shall be Contractor's sole responsibility. Notwithstanding anything herein to the contrary, the grant contained in this paragraph 1 is limited to the portions of the Quarry Property shown

Permit #287

Shell Rock

**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

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JUL 15 1996  
MISSOURI LAND  
RECLAMATION COMMISSION

Signature of Applicant <i>Russell Crawley</i>		Title <i>Env. Geologist</i>		Date <i>7/12/96</i>	
Notary Public Embosser Seal		State <i>Missouri</i>		County (Or City of St. Louis) <i>Greene</i>	
Subscribed and Sworn Before me, This <i>12</i> Day Of <i>July</i> 19 <i>96</i>		Notary Public Signature <i>Nina I Craighead</i>		My Commission Expires <i>11-4-99</i>	
Notary Public Name (Typed or Printed) <i>Nina I. Craighead</i>		<b>Use Rubber Stamp Below</b> <b>NINA I CRAIGHEAD</b> <b>NOTARY PUBLIC STATE OF MISSOURI</b> <b>GREENE COUNTY</b> <b>MY COMMISSION EXP NOV 4, 1999</b>			
Approved By (Director's Representative) <i>Gonna R. McNew</i>			Date Approved <i>11-22-96</i>		Permit Number <i>0287</i>



Journegan Construction  
Hwy 376 Quarry  
Taney Co. MO  
#281

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APR 11 1996

MISSOURI LAND  
RECLAMATION COMMISSION

Hwy 376 Quarry  
Site #14



65

248

248

376

CONNECTOR

265

STONE CO.  
TANEY CO.

SHEPHERD OF THE HILLS

EXPRESSWAY

76

Branson

165

465

Clark  
Airport

College  
of the  
Ozarks

65

Shepherd of the Hills  
Fish Hatchery

Dam

Table  
Rock  
State  
Park

165

OZARK MOUNTAIN HIGHROAD

265

65







MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

file

To be completed for each separate area of disturbance associated with mining operations.		
SITE NAME OR NUMBER 8      McCracken		PERMIT NUMBER 287
COMPANY NAME Leo Journagan Construction Company, Inc.		
COUNTY Christian	1/4 SECTION SW	SECTION 20
TOWNSHIP 27N	RANGE 20W	ACRES 57 M.O.L.
RIVER OR STREAM NAME (FOR IN-STREAM ACRES) NA		
MINERAL COMMODITY Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES) NA

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) Nina R. Howard		
ADDRESS Rt 1, Box 481		
CITY Sparta	STATE MO	ZIP CODE 65655
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ <input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		DATE OF AGREEMENT 03-01-89

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) Nina R. Howard		
ADDRESS Rt 1, Box 481		
CITY Sparta	STATE MO	ZIP CODE 65655
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER (DESCRIBE): _____ <input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		DATE OF AGREEMENT 03-01-89

**NOTE:** Each site must be shown on a map and be included in a public notice and an approved mine plan.

file

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JUL 31 1996

Revised 07/26/96

Permit #287

Missouri Department Of Natural Resources  
Land Reclamation Program

Mc Cracken

P.O. Box 176

Jefferson City, MO 65102

MISSOURI LAND  
RECLAMATION COMMISSION**Mine Plan**☐ Short Term, For One Permit Year☒ Long Term, For Period Through Date:

31-Jul-07

Site # 8

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Equal amounts of unimproved pasture and hardwood forest.**Soil and Topography:****Goss Series, 30%:** Clayey-skeletal, mixed, mesic Typic Palendalfs, 20 percent slope.**A Horizon:** 6 inches, fcherty silt loam, 25% fragments.**B Horizon:** 56 inches, cherty clay, 40% fragments.**Gasconade Series, 35%:** Cherty-skeletal, mixed, mesic Lithic Hapludolls, 45 percent slope.**A Horizon:** 10 inches, flaggy silty clay, 35% fragments.**B Horizon:** 7 inches, flaggy silty clay, 65% fragments.**Tonti Series, 35%:** Fine-loamymixed, mesic Typic Fragiudults, 5 percent slope.**A Horizon:** 7 inches, silt loam.**B Horizon:** 55 inches, cherty silty clay loam, 40% fragments.**Operational Plan-10 CSR 40-10.020(2)(D)1.****A. Topsoil**Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
8 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1

**A**

Purpose Or Land Use

Temporary Cover

Seeding Or Planting Time

As Needed

MISSOURI LAND  
RECLAMATION COMMISSION

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2

**B**

Purpose Or Land Use

All land uses except impoundments

Seeding Or Planting Time

Fall, Spring &amp; Frost

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes



**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	lbs/Acre	Tree or Shrub Species
Big Bluestem	3	
Indiangrass	3	
Little Bluestem	3	
Sideoats Grama	3	
Switchgrass (common)	3	
Forbs Mix	0.75	
Redtop	8	

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
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**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**B. Grading**Describe Proposed Reclaimed Topography, Including Slopes

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following**Grading**10 CSR 40-10.050(10)(A)**

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Replacement of Topsoil**10 CSR 40-10.050(10)(A)**

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Revegetation

Initial revegetation will occur during the first year after grading and soil replacement.

Average Depth of Replaced Topsoil (Inches)

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

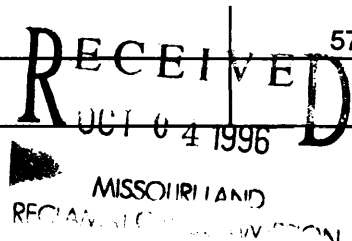
Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water Impoundments (for wildlife, agricultural, or development)

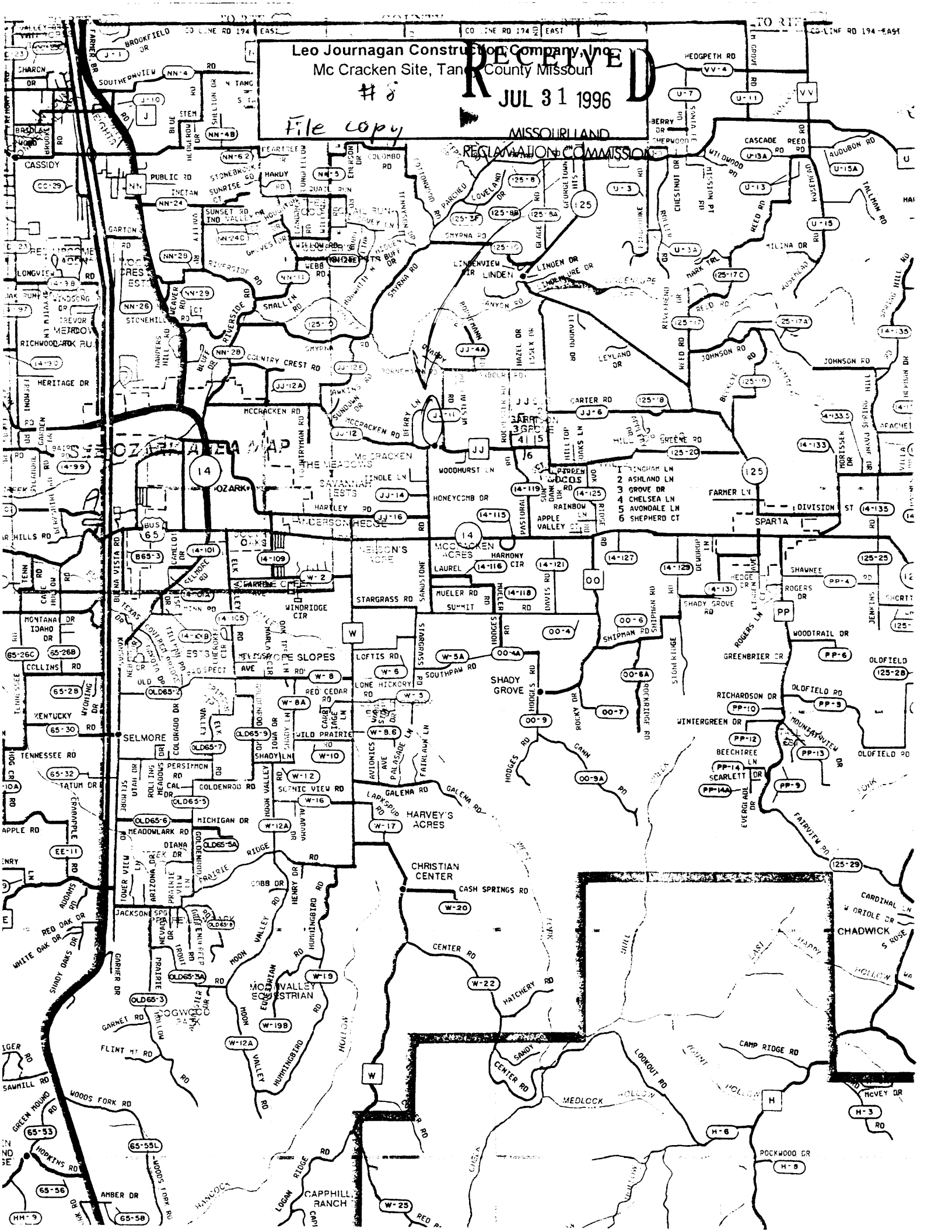


By my signature, I attest to the following:

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowners for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Leo Journagan Construction Company  
McCracken Quarry  
Permit 287

Signature of Applicant <i>Russell Cranley</i>		Title Environmental Geologist	Date October 1, 1996
Notary Public Embosser Seal	State Missouri		County (Or City of St. Louis) Greene
	Subscribed and Sworn Before me, This 01 Day Of October 1996		Use Rubber Stamp Below
	Notary Public Signature <i>Nina I. Craighead</i>	My Commission Expires 11-4-99	NINA I CRAIGHEAD NOTARY PUBLIC STATE OF MISSOURI GREENE COUNTY MY COMMISSION EXP NOV 4, 1999
	Notary Public Name (Typed or Printed) Nina I. Craighead		
Approved By (Director's Representative) <i>Donna R. McLaughlin</i>		Date Approved 10-2-96	Permit Number 0287



Leo Journagan Construction Company, Inc.  
Mc Cracken Site, Tanage County Missouri  
#8  
JUL 31 1996  
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OZARK AREA MAP

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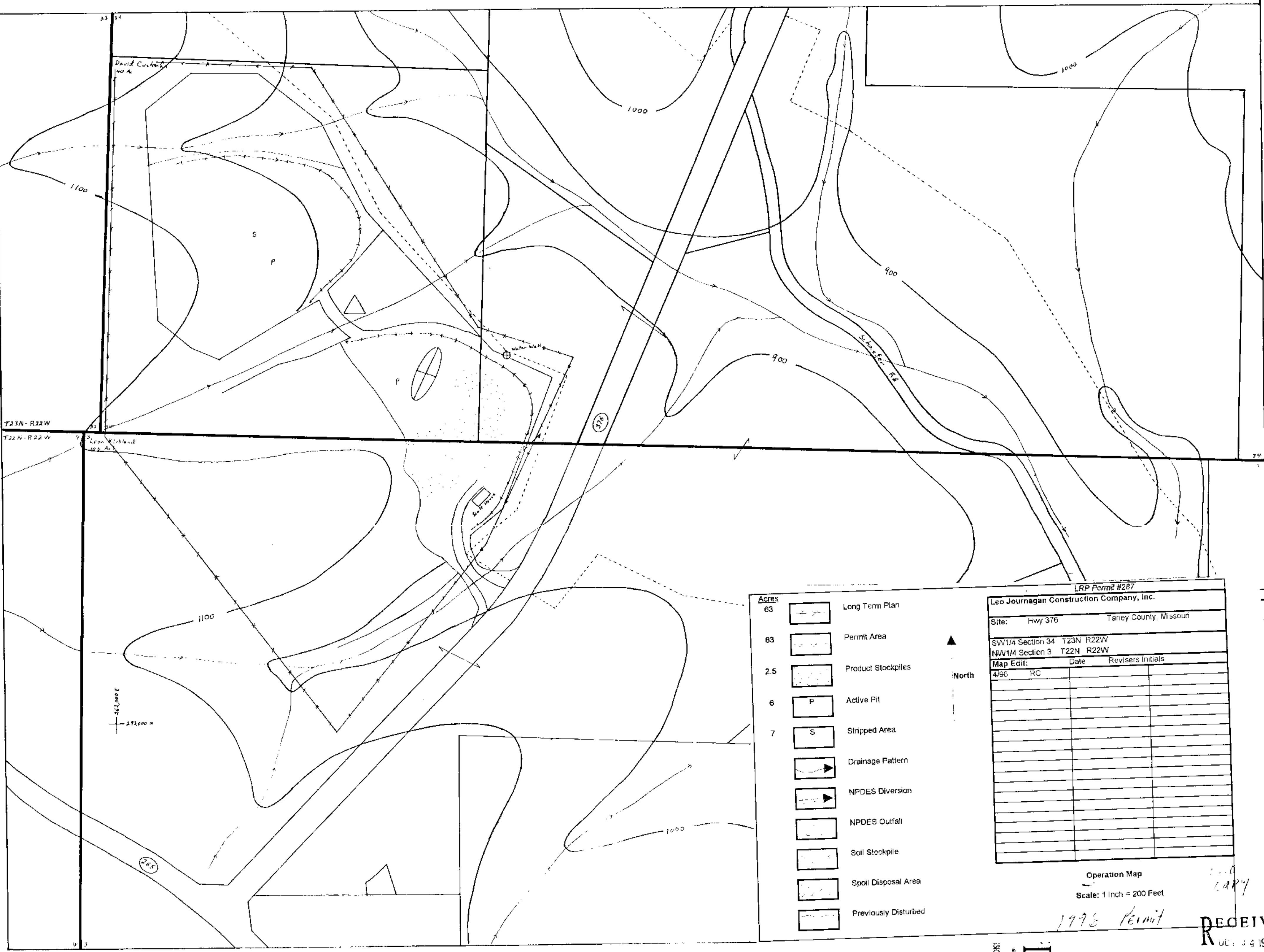
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**LRP Permit #287**  
**Leo Journagan Construction Company, Inc.**  
 Site: Hwy 376 Taney County, Missouri  
 SW1/4 Section 34 T23N R22W  
 NW1/4 Section 3 T22N R22W  
 Map Edit: Date Revisers Initials  
 4/96 RC

Reclamation Map  
 Scale: 1 Inch = 200 Feet

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**LRP Permit #287**  
**Leo Journagan Construction Company, Inc.**  
 Site: Hwy 376 Taney County, Missouri  
 SW1/4 Section 34 T23N R22W  
 NW1/4 Section 3 T22N R22W  
 Map Edit: Date Revisers Initials  
 4/96 RC

Operation Map  
 Scale: 1 Inch = 200 Feet

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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

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SITE INFORMATION FORM

Revised 7/29/96

MISSOURI LAND  
RECLAMATION COMMISSION

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER Protem <i>Site #12</i>		PERMIT NUMBER 287
COMPANY NAME Leo Jourmagan Construction Company, Inc.		
COUNTY Taney	1/4 SECTION SW	SECTION 16
TOWNSHIP 21N	RANGE 17W	ACRES 160
RIVER OR STREAM NAME (FOR IN-STREAM ACRES)		
MINERAL COMMODITY Limestone		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE) John Hunter		
ADDRESS Rt. 2 Box 165		
CITY Protem	STATE Missouri	ZIP CODE 65713
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT Apr-91
<input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE) John Hunter		
ADDRESS Rt. 2 Box 165		
CITY Protem	STATE Missouri	ZIP CODE 65713
SOURCE OF RIGHT TO MINE (CHECK ONE): <input type="checkbox"/> MINERAL DEED <input type="checkbox"/> WARRANTY DEED <input type="checkbox"/> OTHER(DESCRIBE):		DATE OF AGREEMENT Apr-91
<input checked="" type="checkbox"/> LEASE <input type="checkbox"/> VERBAL AGREEMENT		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

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Revised 07/29/96 Permit #287  
Missouri Department Of Natural Resources  
Land Reclamation Program  
**Mine Plan**

Protem  
P.O. Box 176  
Jefferson City, MO 65102

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☐ Short Term, For One Permit Year  
☒ Long Term, For Period Through Date: 31-Jul-07

#12

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Equal amounts of unimproved pasture and hardwood forest.

**Soil and Topography:**

**Gatewood Series, 50%:** Clayey-Skeletal, mixed, mesic Lithic Hapludolls, 15 percent slope.

**A Horizon:** 4 inches, flaggy loam, 55% fragments.

**B Horizon:** 10 inches, extremely flaggy clay loam, 70% fragments.

**Gasconade Series, 50%:** Very fine, mixed, mesic Typic Hapludolls, 5 percent slope.

**A Horizon:** 9 inches, very gravely silt loam, 20% fragments.

**B Horizon:** 20 inches, gravely silt loam, 10% fragments.

an-10 CSR 40-10.020(2)(D)1.

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
6 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may combine the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1

**A**

Purpose Or Land Use

Temporary Cover

Seeding Or Planting

As Needed

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2

**B**

Purpose Or Land Use

All land uses except impoundments

Seeding Or Planting Time

Fall, Spring &amp; Frost

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes



**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
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**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
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**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**B. Grading**Describe Proposed Reclaimed Topography, Including Slopes

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following**Grading

10 CSR 40-10.050(10)(A)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Replacement of Topsoil

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

Revegetation

Initial revegetation will occur during the first year after grading and soil replacement.

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Average Depth of Replaced Topsoil (Inches)

12 inches of soil material

**D. Use of Land When Reclaimed**

Estimated Acres:

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

23

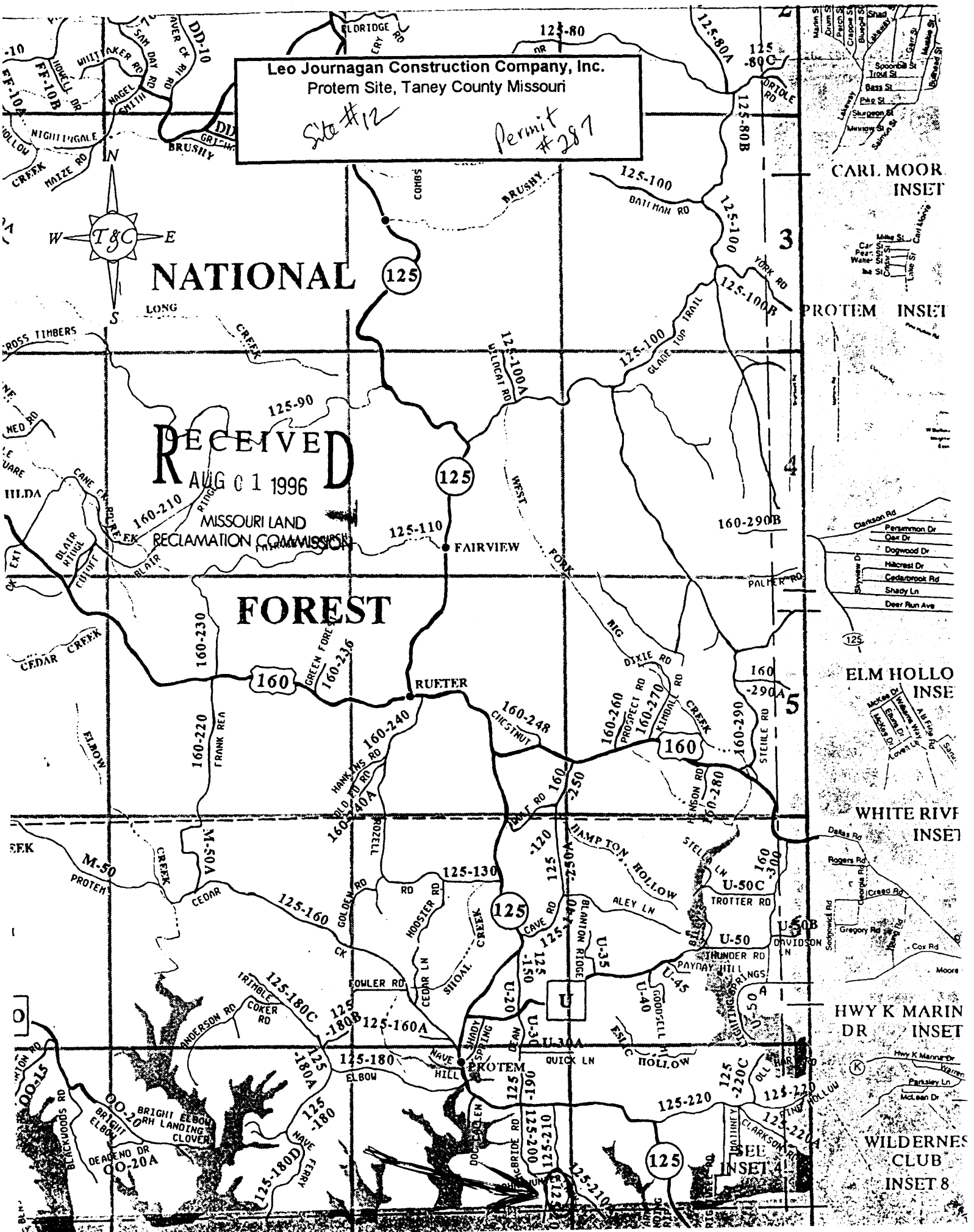
Water Impoundments (for wildlife, agricultural, or development)

**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Signature of Applicant <i>Russell C. Day</i>		Title Environmental Geologist		Date 7/29/96	
Notary Public Embosser Seal	State <i>Missouri</i>			County (Or City of St. Louis) <i>Greene</i>	
	Subscribed and Sworn Before me, This 29 Day Of <i>July</i> 19 96			Use Rubber Stamp Below	
	Notary Public Signature <i>Nina I. Craighead</i>		My Commission Expires 11-4-99		<b>NINA I CRAIGHEAD</b> <b>NOTARY PUBLIC STATE OF MISSOURI</b> <b>GREENE COUNTY</b> <b>MY COMMISSION EXP NOV 4, 1999</b>
	Notary Public Name (Typed or Printed) Nina I. Craighead				
Approved By (Director's Representative) <i>Donna R. Thompson</i>			Date Approved 11-22-96		Permit Number 0287

file



S20-T27N-R20W  
Christian Co. MO

**Reclamation Map**  
Scale: 1 Inch = 200 Feet

**Legend:**

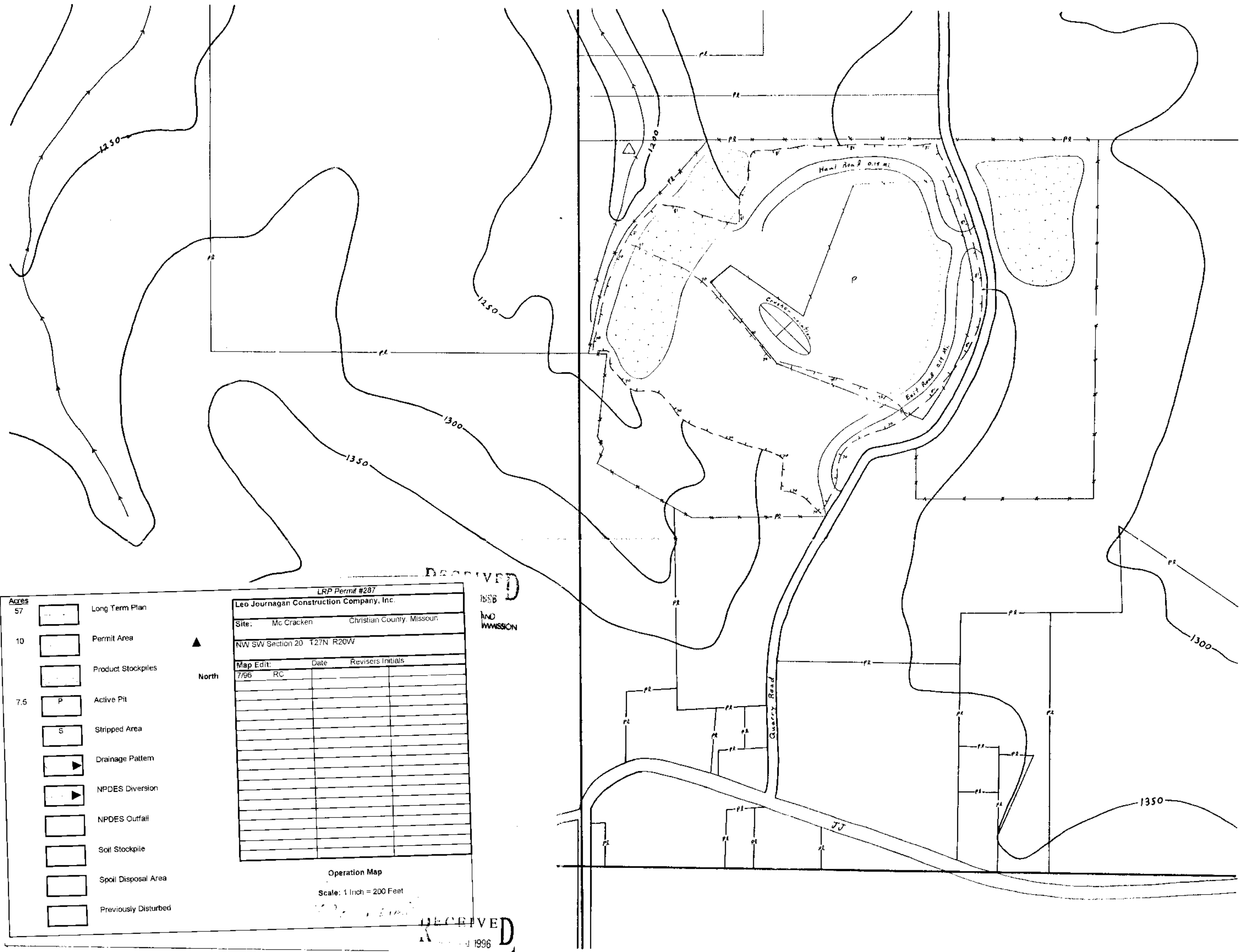
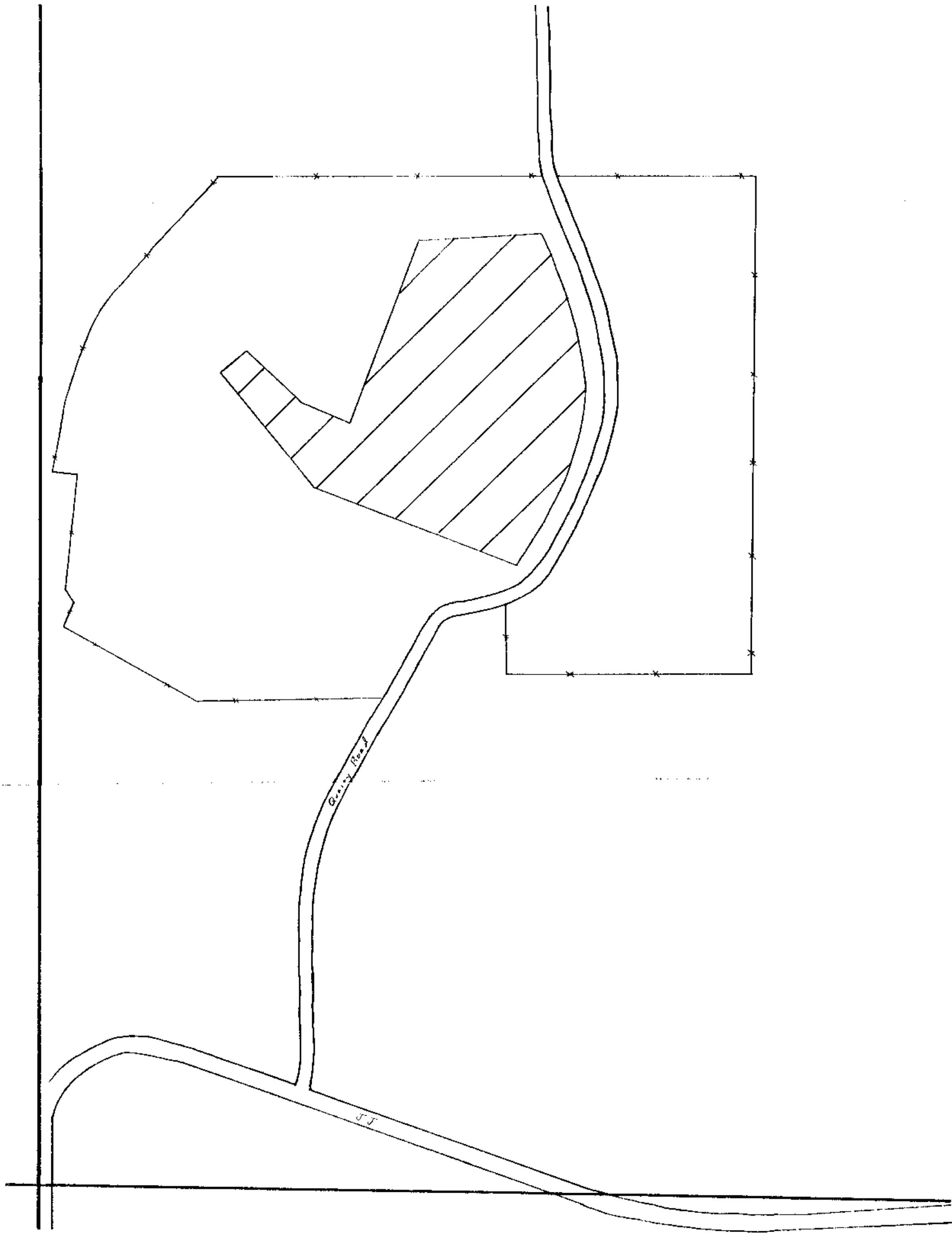
Acres	Symbol	Description
57	[Symbol]	Long Term Plan
10	[Symbol]	Bonded Area
	[Symbol]	Bond Released
	G	Grading Completed
	T	Topsoil Replaced
	L	Impoundment
57	d	Development
	a	Agriculture
	w	Wildlife

**Map Edit:**

Map Edit	Date	Revisers Initials
7/96	RC	

**Site:** Mc Cracken, Christian County, Missouri  
**Location:** NW SW Section 20 T27N R20W

**Reclamation Commission**  
MISSOURI AND  
RECLAMATION COMMISSION



**Operation Map**  
Scale: 1 Inch = 200 Feet

**Legend:**

Acres	Symbol	Description
57	[Symbol]	Long Term Plan
10	[Symbol]	Permit Area
	[Symbol]	Product Stockpiles
7.5	P	Active Pit
	S	Stripped Area
	[Symbol]	Drainage Pattern
	[Symbol]	NPDES Diversion
	[Symbol]	NPDES Outfall
	[Symbol]	Soil Stockpile
	[Symbol]	Spill Disposal Area
	[Symbol]	Previously Disturbed

**Map Edit:**

Map Edit	Date	Revisers Initials
7/96	RC	

**Site:** Mc Cracken, Christian County, Missouri  
**Location:** NW SW Section 20 T27N R20W

**Reclamation Commission**  
MISSOURI AND  
RECLAMATION COMMISSION

MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION  
**SITE INFORMATION FORM**

Revised 7/16/96

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To be completed for each separate area of disturbance associated with mining operations.		
SITE NAME OR NUMBER		PERMIT NUMBER
Ozark		287
COMPANY NAME		
Leo Jourmagan Construction Company, Inc.		
COUNTY	1/4 SECTION	SECTION
Christian	NE NW	33 34
TOWNSHIP	RANGE	ACRES
28N	21W	124
RIVER OR STREAM NAME (OR IN-STREAM ACRES)		
MINERAL COMMODITY		ESTIMATED TONS/YEAR (FOR GRAVEL SITES)
Limestone		

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Jourmagan Construction Company, Inc.		
ADDRESS		
3003 East Chestnut Expressway, Suite 1200		
CITY	STATE	ZIP CODE
Springfield	MO	65802
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		NA
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)		
Leo Jourmagan Construction Company, Inc.		
ADDRESS		
3003 East Chestnut Expressway, Suite 1200		
CITY	STATE	ZIP CODE
Springfield	MO	65802
SOURCE OF RIGHT TO MINE (CHECK ONE):		DATE OF AGREEMENT
<input type="checkbox"/> MINERAL DEED <input type="checkbox"/> LEASE		3/16/95
<input checked="" type="checkbox"/> WARRANTY DEED <input type="checkbox"/> VERBAL AGREEMENT		
<input type="checkbox"/> OTHER(DESCRIBE):		

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.

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JUL 18 1996

Missouri Department Of Natural Resources  
Land Reclamation Program

P.O. Box 176  
Jefferson City, MO 65102

MISSOURI LAND  
RECLAMATION COMMISSION

Mine Plan Revised 07/16/96 Permit #287

Ozark

☐ Short Term, For One Permit Year

☒ Long Term, For Period Through Date: 31-Jul-07

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator). Including Soil, Vegetation and Topography.

**Vegetation:** Hardwood forest and pasture.

**Soil and Topography:**

**Goss Series:** Clayey-skeletal, mixed, mesic Typic Paleudalfs; 2 to 20 percent slope.

**A Horizon:** 10 inches, very cherty silt loam, 25 percent fragments.

**B Horizon:** 52 inches, very cherty silty clay loam, 40 percent fragments.

**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
10 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. All soil horizons with less than 25% fragments will be saved as soil.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.



**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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MISSOURI LAND  
RECLAMATION COMMISSION

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

Attach Additional Sheets For Additional Seed Mixes

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**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas planted in mixes B and C.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

**RECEIVED**  
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Attach Additional Sheets For Additional Seed Mixes

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading**

10 CSR 40-10.050(10)(A)&(C)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

**D. Use of Land When Reclaimed****Estimated Acres:**

Estimated acreage of each land use below, after reclamation

Wildlife (forest or other habitat with livestock excluded)

Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

105

Water Impoundments (for wildlife, agricultural, or development)

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MISSOURI LAND  
RECLAMATION COMMISSION

Permit #287

Ozark

**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Signature of Applicant <i>Russell Crawley</i>		Title <i>Env. Geologist</i>		Date <i>7/16/96</i>	
Notary Public Embosser Seal	State <i>MO</i>		County (Or City of St. Louis) <i>GREENE</i>		
	Subscribed and Sworn Before me, This <i>16th</i> Day of <i>July</i> 19 <i>96</i>		Use Rubber Stamp Below		
	Notary Public Signature <i>[Signature]</i>		My Commission Expires <i>2-1-98</i>		
	Notary Public Name (Typed or Printed) <i>JOHN A. VIEW III</i>		<b>JOHN A VIEW III</b> <b>NOTARY PUBLIC — NOTARY SEAL</b> <b>STATE OF MISSOURI</b> <b>CHRISTIAN COUNTY</b> <b>MY COMMISSION EXP. FEB. 1, 1998</b>		
Approved By (Director's Representative) <i>Norma R. Menown</i>		Date Approved <i>11-22-96</i>		Permit Number <i>0287</i>	

File  
copy

0013

OLD HIGHWAY 65

• weathershield Hwy. 65 & C  
• Lincoln Ozark, MO  
• Norco Bus. (417) 581-66  
• Bird 1-800-554-91  
• Rollex BOB EDWARD

Leo Journagan Construction Company, Inc.

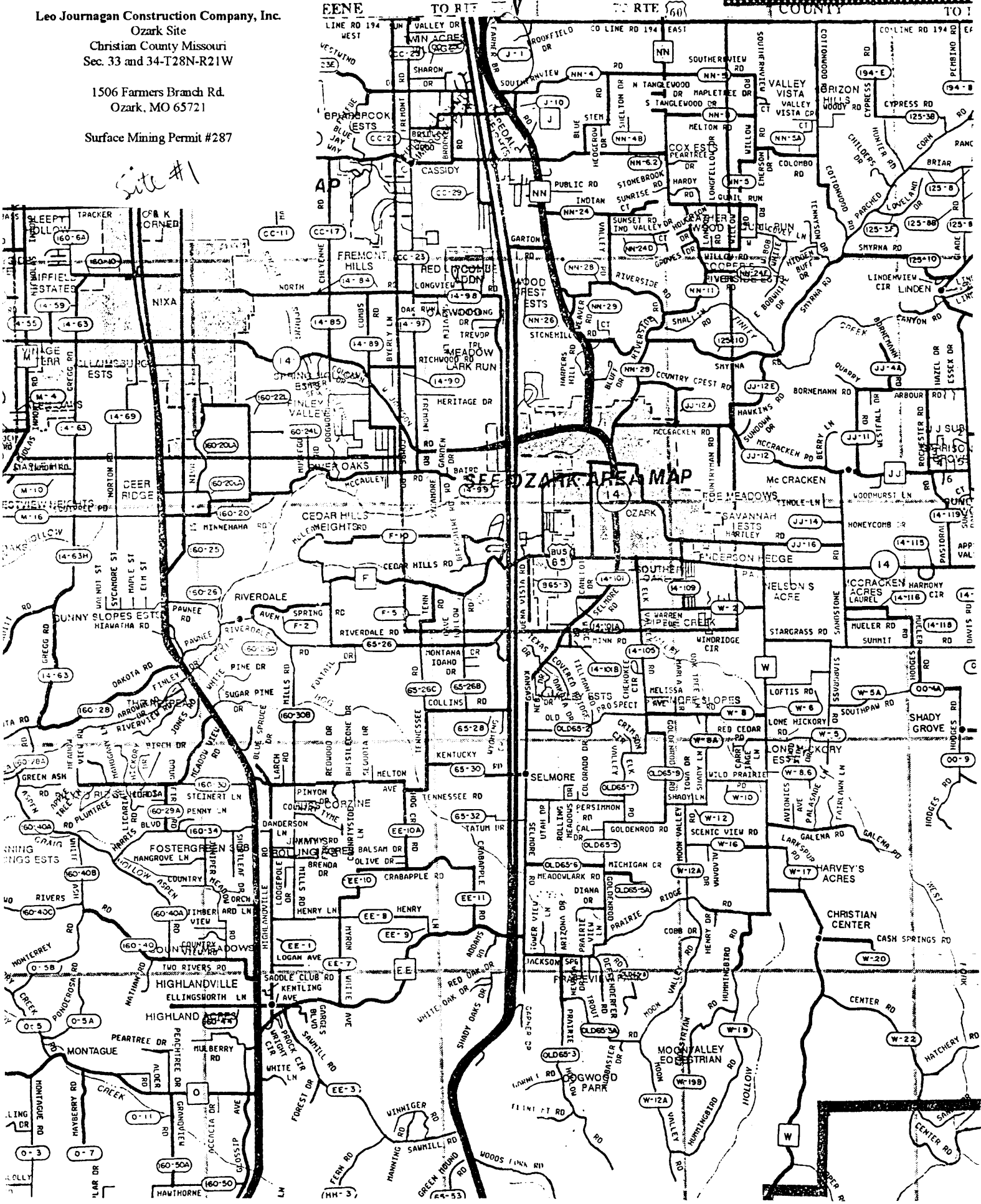
Ozark Site

Christian County Missouri  
Sec. 33 and 34-T28N-R21W

1506 Farmers Branch Rd.  
Ozark, MO 65721

Surface Mining Permit #287

Site #1





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MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

SITE INFORMATION FORM #1 of 2

file  
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RECLAMATION COMMISSION

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER

Reeds Spring

Site #5

PERMIT NUMBER

287

COMPANY NAME

Leo Joumagan Construction Company, Inc.

COUNTY

Stone

1/4 SECTION

SECTION

23

TOWNSHIP

RANGE

ACRES

24N

23W

100

R OR STREAM NAME (FOR IN-STREAM ACRES)

MINERAL COMMODITY

Limestone

ESTIMATED TONS/YEAR (FOR GRAVEL SITES)

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Billy Taylor

ADDRESS

General Delivery

CITY

STATE

CODE

Reeds Spring

Missouri

65737

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☒ LEASE

1/3/91

☐ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Billy Taylor

ADDRESS

General Delivery

CITY

STATE

ZIP CODE

Reeds Spring

Missouri

65737

SOURCE OF RIGHT TO MINE (CHECK ONE):

DATE OF AGREEMENT

☐ MINERAL DEED

☒ LEASE

1/3/91

☐ WARRANTY DEED

☐ VERBAL AGREEMENT

☐ OTHER(DESCRIBE):

NOTE: Each site must be shown on a map and be included in a public notice and an approved mine plan.



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
LAND RECLAMATION COMMISSION

**SITE INFORMATION FORM # 2 of 2**

**RECEIVED**  
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*File*

To be completed for each separate area of disturbance associated with mining operations.

SITE NAME OR NUMBER	PERMIT NUMBER
Reeds Spring	287

COMPANY NAME

Leo Jouragan Construction Company, Inc.

COUNTY	1/4 SECTION	SECTION
Stone	SW	23
TOWNSHIP	RANGE	ACRES
24N	23W	11

RIVER OR STREAM NAME (FOR IN-STREAM ACRES)

MINERAL COMMODITY	ESTIMATED TONS/YEAR (FOR GRAVEL SITES)
Limestone	

NAME OF LANDOWNER (ATTACH LIST IF MORE THAN ONE)

Garth Mease (Jim Mease)

ADDRESS

General Delivery

CITY	STATE	
Reeds Spring	Missouri	65737

SOURCE OF RIGHT TO MINE (CHECK ONE):

- ☐ MINERAL DEED
 ☒ LEASE
 ☐ WARRANTY DEED
 ☐ VERBAL AGREEMENT
 ☐ OTHER(DESCRIBE):

DATE OF AGREEMENT

10/10/94

MINERAL RIGHTS OWNER (ATTACH LIST IF MORE THAN ONE)

Garth Mease (Jim Mease)

ADDRESS

General Delivery

CITY	STATE	
Reeds Spring	Missouri	65737

SOURCE OF RIGHT TO MINE (CHECK ONE):

- ☐ MINERAL DEED
 ☒ LEASE
 ☐ WARRANTY DEED
 ☐ VERBAL AGREEMENT
 ☐ OTHER(DESCRIBE):

DATE OF AGREEMENT

10/10/94

**NOTE:** Each site must be shown on a map and be included in a public notice and an approved mine plan.

BOOK 244 PAGE 1292

AUG 21 1996

Stone County Publishing Co., Crane, Mo.

MISSOURI LAND  
RECLAMATION COMMISSION

# QUIT CLAIM DEED

FILE

**THIS INDENTURE** made on the 1st day of September 1994, by and between

VIRGINIA LUTES, a single person  
Route 1, Box 1, Reeds Spring, MO 65737      part y      of the first part, and

PATRICIA GOSSIN  
P.O. Box 48, Crane, MO 65633

of the county of Stone in the state of Missouri, party of the second part,

WITNESSETH, That the said party of the first part, for and in consideration of the sum of

ONE DOLLAR and other valuable consideration

XXXXDDKILAHX

to her paid by the said party of the second part the receipt of which is hereby acknowledged, do es by

these presents, Remise, Release and forever Quit-Claim unto the said part Y of the second part, the following described Lots,

Tracts or Parcels of land lying, being and situate in the county of **STONE** and State of Missouri, to-wit:

All right, title and interest in mineral lease with Jim Mease and Mary Mease dated January 18, 1962, covering the East One-half of the Northwest Quarter (East 1/2 of the NW1/4), and the Northeast Quarter of the Southwest Quarter (NE1/4 of the SW1/4), all in Section 23, Township 24, Range 23, Stone County, Missouri, containing 120 acres, more or less; and all right, title and interest in and to a Quarry Lease covering the above-described property with Leo Journagan Construction Company, Inc., as lessee, dated June 6, 1994.

Grantor states that she is the widow of Samuel T. Lutes, who died August 19, 1971, the two not having been divorced, and that she is the sole surviving owner of Samuel T. Lutes Sand and Gravel Company, Reeds Spring, Missouri.

[illegible]

XDBENLXRX XDXNFX X19XXXXXXCDDXDMXHX RUCDDXK JOTIX XMHX LACK FOR XHX XMHY MX XX  
XSTORESOLD IN DEED BOOK XXXDXXX XXX

TO HAVE AND TO HOLD the same with all rights, immunities, privileges and appurtenances thereto belonging, unto the said successors  
party of the second part, her ~~XXXX~~ and assigns forever so that neither the said party of the first part nor her successors  
~~XXXX~~ nor any other person or persons for her or in her name or behalf shall or will

hereafter claim or demand any right or title to the aforesaid premises or any part thereof; but they and every one of them shall be,

file

Revised 07/22/96 Permit #287  
Missouri Department Of Natural Resources  
Land Reclamation Program  
**Mine Plan**

Reeds Spring  
P.O. Box 176  
Jefferson City, MO 65102

Site #5

☐ Short Term, For One Permit Year  
☒ Long Term, For Period Through Date: 31-Jul-07

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Hardwood forest.

**Soil and Topography:**

**Blueye Series:** Clayey-Skeletal, mixed, mesic Lithic Hapludolls, 5 to 30 percent slope.

**A Horizon:** 9 inches, gravelly silt loam, 20% fragments.

**B Horizon:** 30 inches, gravelly clay, 30% fragments.

**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting 9 Inches	Is Topsoil to be Sold or Discarded Offsite? <input type="checkbox"/> Yes or <input checked="" type="checkbox"/> No
---	---

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. The soil material may combine the A and B horizons to reduce the percent of rock fragments. Soil material with less than 25% fragments will be saved.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

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**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestem	3		
Indiangrass	3		
Little Bluestem	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		

Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring
---------------------------------	--	------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

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Attach Additional Sheets For Additional Seed Mixes

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading****10 CSR 40-10.050(10)(A)**

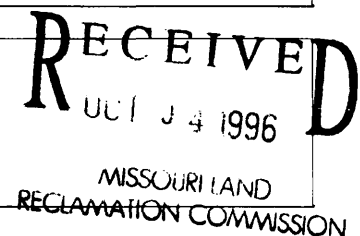
Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil****10 CSR 40-10.050(10)(A)**

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

**Average Depth of Replaced Topsoil (Inches)**

12 inches of soil material

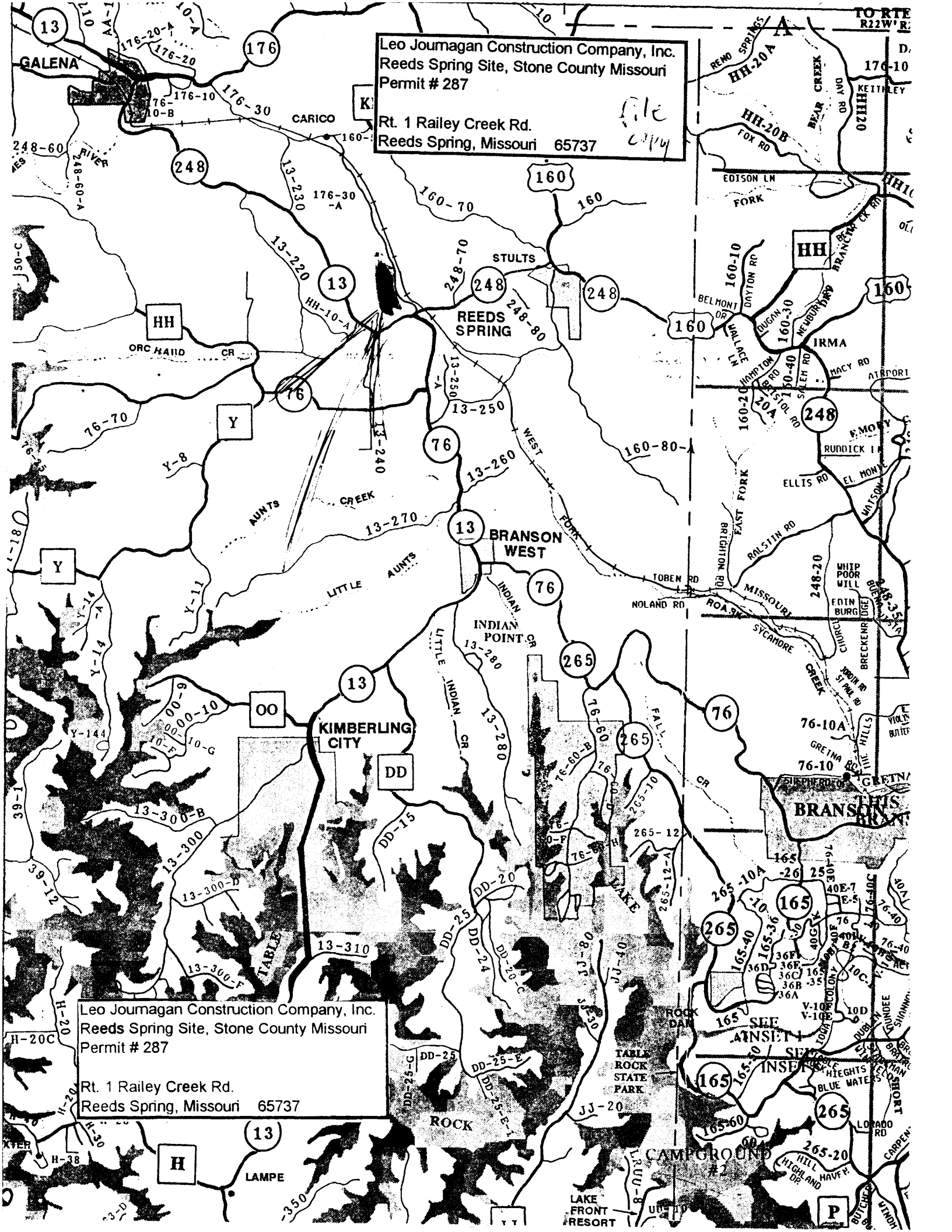
<b>D. Use of Land When Reclaimed</b>	<b>Estimated Acres:</b>
Estimated acreage of each land use below, after reclamation	
Wildlife (forest or other habitat with livestock excluded)	
Agriculture (pasture, cropland, and horticultural)	
Development (residential, industrial, and recreational)	111
Water Impoundments (for wildlife, agricultural, or development)	

**By my signature, I attest to the following:**

1. All statements made on this Mine Plan Form are correct, complete, and true, to the best of my knowledge.
2. I or the company I am authorized to represent intend(s) to mine in accordance with this Mine Plan Form, and in accordance with the Missouri Land Reclamation Act, Section 444.760 through 444.789, RSMo (Supp. 1990), and all rules, regulations, orders, decisions and permits of the Missouri Land Reclamation Commission pertaining to my company's surface mining operations.
3. I have obtained the approval of all landowner's for all proposed post-reclamation land uses.
4. I have a valid agreement with all landowners which gives me the right to grant access to the Director of the Missouri Land Reclamation Commission and his authorized representatives, and I grant such access, and further where I have no such right, I have attached signed affidavits from the landowners, granting such access.

Signature of Applicant <i>Russell Cramley</i>		Title Environmental Geologist		Date 7/22/96	
Notary Public Embosser Seal	State <i>Missouri</i>			County (Or City of St. Louis) <i>Greene</i>	
	Subscribed and Sworn Before me, This 22 Day Of <i>July</i> 19 <i>96</i>			Use Rubber Stamp Below	
	Notary Public Signature <i>Nina I. Craighead</i>		My Commission Expires 11-4-99		<b>NINA I CRAIGHEAD</b> <b>NOTARY PUBLIC STATE OF MISSOURI</b> <b>GREENE COUNTY</b> <b>MY COMMISSION EXP NOV 4, 1999</b>
	Notary Public Name (Typed or Printed) <i>Nina I Craighead</i>				
Approved By (Director's Representative) <i>Gonna R. Mancow</i>			Date Approved		Permit Number <b>0287</b>





Leo Jouragan Construction Company, Inc.  
Reeds Spring Site, Stone County Missouri  
Permit # 287

Rt. 1 Railey Creek Rd.  
Reeds Spring, Missouri 65737

*file*  
*copy*

Leo Jouragan Construction Company, Inc.  
Reeds Spring Site, Stone County Missouri  
Permit # 287

Rt. 1 Railey Creek Rd.  
Reeds Spring, Missouri 65737



FILE

Missouri Department Of Natural Resources  
Land Reclamation Program

P.O. Box 176  
Jefferson City, MO 65102  
Shell Rock

**Mine Plan**

Revised 07/12/96

Permit #287

☐ Short Term, For One Permit Year

☒ Long Term, For Period Through Date:

31-Jul-07

site # 3

Description of Site Prior to Land Reclamation Commission Permitting (By Applicant or Prior Operator), Including Soil, Vegetation and Topography.

**Vegetation:** Hardwood Forest.

**Soil and Topography:**

**Moko Series, 50%:** Loamy-skeletal, mixed, mesic Lithic Hapludalfs; 45 percent slope.

**A Horizon:** 3 inches, very friable very flaggy silt loam, 40 percent fragments.

**B Horizon:** 7 inches, very friable very flaggy silty clay loam, 40 percent fragments.

**Ocie Series, 50%:** Loamy-skeletal over clayey, mixed, mesic Typic Hapludalfs, 30 percent slope.

**A Horizon:** 7 inches, very friable very gravelly silt loam, 15 percent fragments.

**B Horizon:** 35 inches, friable very gravelly silty clay loam, 30 percent fragments.

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**Operational Plan-10 CSR 40-10.020(2)(D)1.**

**A. Topsoil**

Average Depth of Topsoil, Prior to Land Reclamation Commission Permitting  
5 Inches

Is Topsoil to be Sold or Discarded Offsite?

☐ Yes or ☒ No

Describe Methods and Equipment Used for Topsoil Removal

Soil material will be removed with scrapers, loaders and dump trucks. Due to the thin rocky nature of the soil at this site it is unlikely that salvageable soil will be encountered. All soil horizons with less than 25% fragments will be saved as soil.

Describe Methods and Equipment Used for Topsoil Storage and Protection

Soil material will be stockpiled within the permitted area and seeded with Mix A to prevent erosion. If possible soil material will be hauled directly to reclamation sites.

**B. Spoil**

Describe Methods and Locations of Spoil Placement and Disposal

Soil materials that contain excess fragments, lower soil horizons and waste rock will be referred to as spoil. These materials will be used as a base below soil replacement areas, to reduce highwalls, stockpiled as construction fill or placed in permanent disposal areas. The disposal areas will be active for the entire life of the mine.

**C. Acid Materials**

Describe Methods and Equipment Used for Handling Acid Material (If None is Anticipated, Write "None" Below)

None

**D. Pit Information (Give All Dimensions in Feet)**

Describe Location and Orientation of Pit, If Not Clear on Site Maps

See Map

Yes No

☐☒

Will any excavation be at or within fifty feet (50') of the right-of-way of any public road?

☐☒

Will any highwall consisting of unconsolidated materials be left within fifty feet of the right-of-way of any public road? (NOTE: For unconsolidated materials left in place, a slope of no more than forty degrees may start near the right-of-way, and in no case may the excavation be closer to the right-of-way than fifty feet or twenty-five feet plus one and one-half (1-1/2) times the depth of unconsolidated material, whichever is greater, unless a variance is granted by the Commission.)

☐☒

Will any excavation start at or within fifty feet (50') of any property line?  
(NOTE: If the answer is "yes", a safety barrier may be needed.)

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Revised 10/17/96 Permit #287 Shell Rock

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.**

**A. Revegetation (Attach additional sheets, if needed)**

Revegetation Mix #1 <b>A</b>	Purpose Or Land Use Temporary Cover	Seeding Or Planting Time As Needed
---------------------------------	--	---------------------------------------

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Smooth Bromegrass and Perennial Ryegrass or Fescue	12 12 25		
Annual Ryegrass	50		

Revegetation Mix #2 <b>B</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Fall, Spring & Frost
---------------------------------	--	--

**Describe Methods and Equipment to be Used for Seeding or Planting**

Lime and fertilizer will be applied according to recommendations made, based on an analysis of soil texture and nutrients.

Mulch will be applied to all slopes exceeding 5:1.

The seed mix will be broadcast and mulched as needed.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Ladino Clover or Crown Vetch	8		
Smooth Bromegrass	12		
Orchardgrass	12		
Perennial Ryegrass	12		
Annual Ryegrass	50		

Attach Additional Sheets For Additional Seed Mixes

**Reclamation Plan-10 CSR 40-10.020(2)(D)2.****A. Revegetation** (Attach additional sheets, if needed)

Revegetation Mix #3 <b>C</b>	Purpose Or Land Use All Land uses except impoundments	Seeding Or Planting Time Winter and Spring
---------------------------------	--	---

**Describe Methods and Equipment to be Used for Seeding or Planting**

The seed mix will be broadcast on areas with sufficient cover to prevent erosion that have been seeded with mix A or B. On areas where the soil is slightly acidic or has low fertility this mix is expected to become dominant.

All species are not expected to survive on all sites due to differing micro-environments. The mix is intended to provide a plant community that will protect from erosion, aid in soil generation and encourage the re-establishment of native species.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
Big Bluestern	3		
Indiangrass	3		
Little Bluestern	3		
Sideoats Grama	3		
Switchgrass (common)	3		
Forbs Mix	0.75		
Redtop	8		
Revegetation Mix #4 <b>D</b>	Purpose Or Land Use All land uses except impoundments	Seeding Or Planting Time Spring	

**Describe Methods and Equipment to be Used for Seeding or Planting**

Tree seedlings will be added to areas with sufficient cover to prevent erosion.

Seeded Species	Pounds/Acre	Tree or Shrub Species	Stems/Acre
		Jack Pine, Red Pine, Persimmon, Red Mulberry, Hackberry, Shrub Lespedeza and/or Hazelnut	700

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Attach Additional Sheets For Additional Seed Mixes

**B. Grading****Describe Proposed Reclaimed Topography, Including Slopes**

The spoil consist of soil horizons with greater than 25 percent fragments and waste rock. Typically all voids are filled with soil size particles resulting in a good root growth material. The spoil will be used to cover highwalls, create natural areas or to reduce the depth of the pit floor. Soil material with less than 25% fragments will be redistributed at a thickness of 12 inches on locations that are expected to have a udic (free draining) soil environment and slopes of 3:1 or less.

Areas exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with soil material after covering areas of lesser slope, these areas will always have at least 24 inches of root growth material. At no time will the slope of the material be artificially increased beyond that at which the material is naturally stable.

All other areas not exempted from the grading requirements by 10 CSR 40-10.050(5)(B) will be covered with a layer of soil material, as available to a minimum thickness of 12 inches. The slopes will be 5:1 or less.

If an area is not conducive to vegetation it will be covered with coarse aggregate, (Examples: columnar weathering above a highwall, parking areas, spillways, etc.).

**C. Describe The General Sequence and Timing of the Following Activities****Grading**

10 CSR 40-10.050(10)(A)&(C)

Grading will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Replacement of Topsoil**

10 CSR 40-10.050(10)(A)

Topsoil replacement will be completed within twelve (12) months after the expiration or renewal of the permit on areas no longer needed as a part of the active operation of the site.

**Revegetation**

Initial revegetation will occur during the first year after grading and soil replacement.

Average Depth of Replaced Topsoil (Inches)

12 inches of soil material

**D. Use of Land When Reclaimed**

Estimated acreage of each land use below, after reclamation

Estimated Acres:

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Wildlife (forest or other habitat with livestock excluded)

125

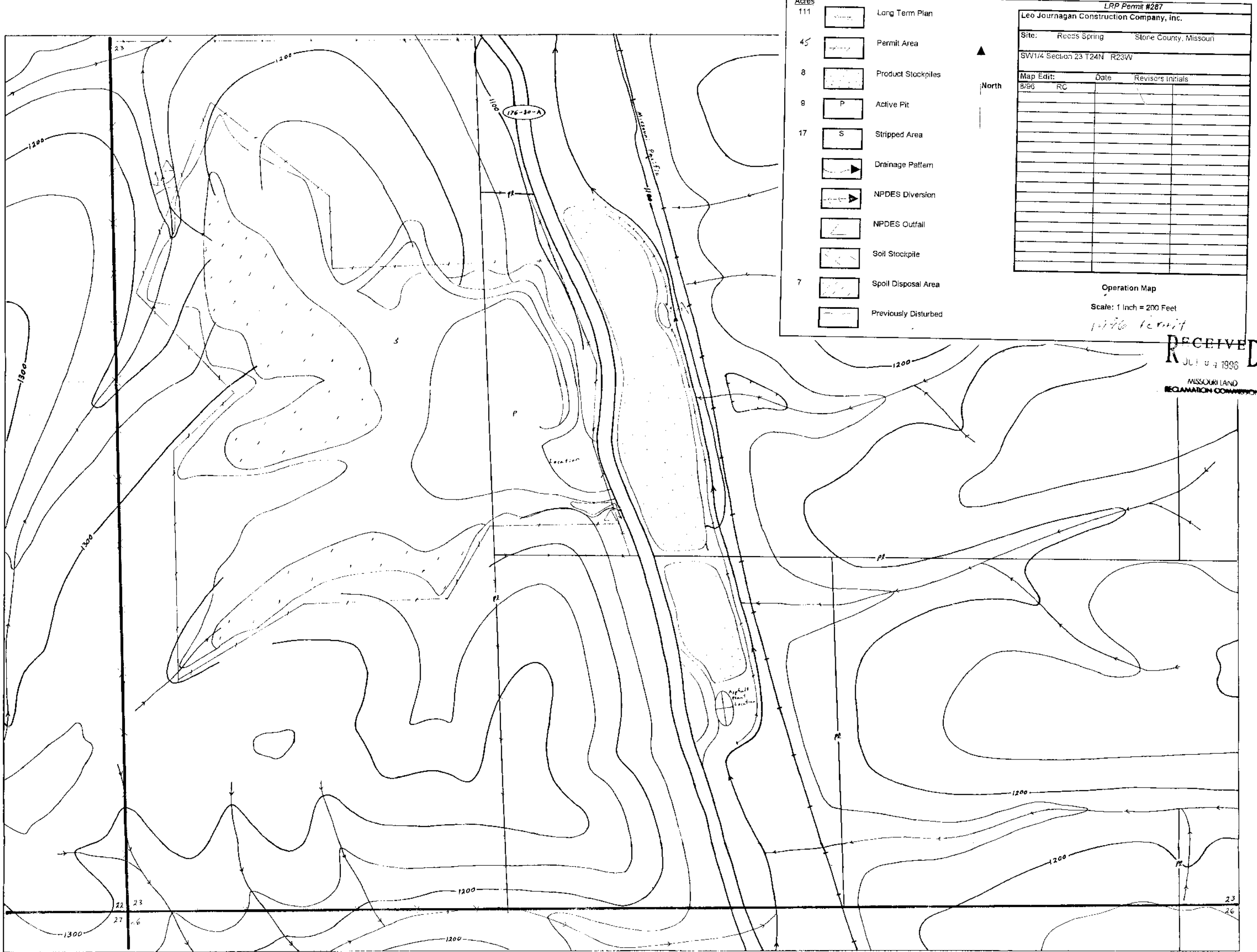
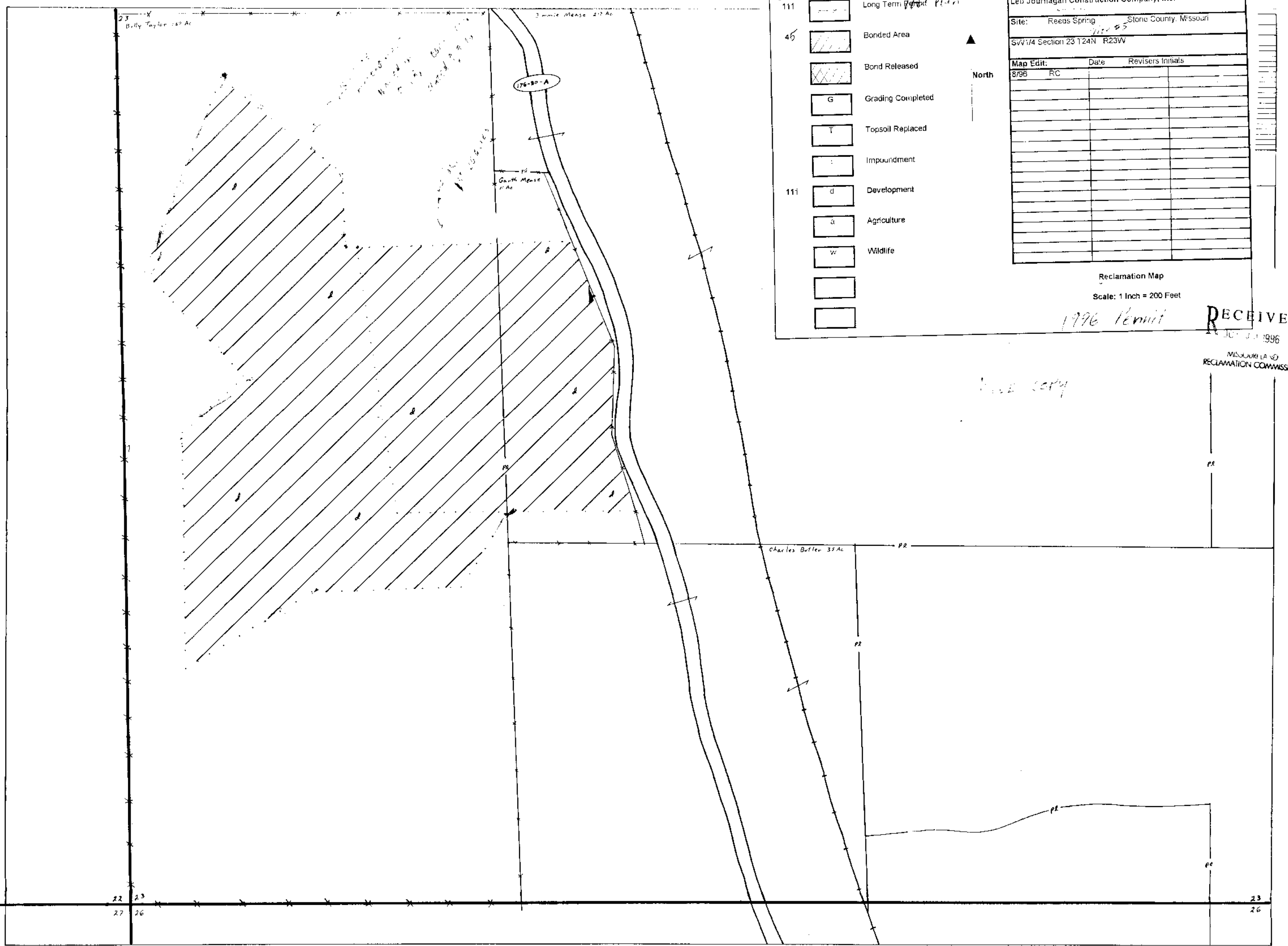
Agriculture (pasture, cropland, and horticultural)

Development (residential, industrial, and recreational)

Water Impoundments (for wildlife, agricultural, or development)

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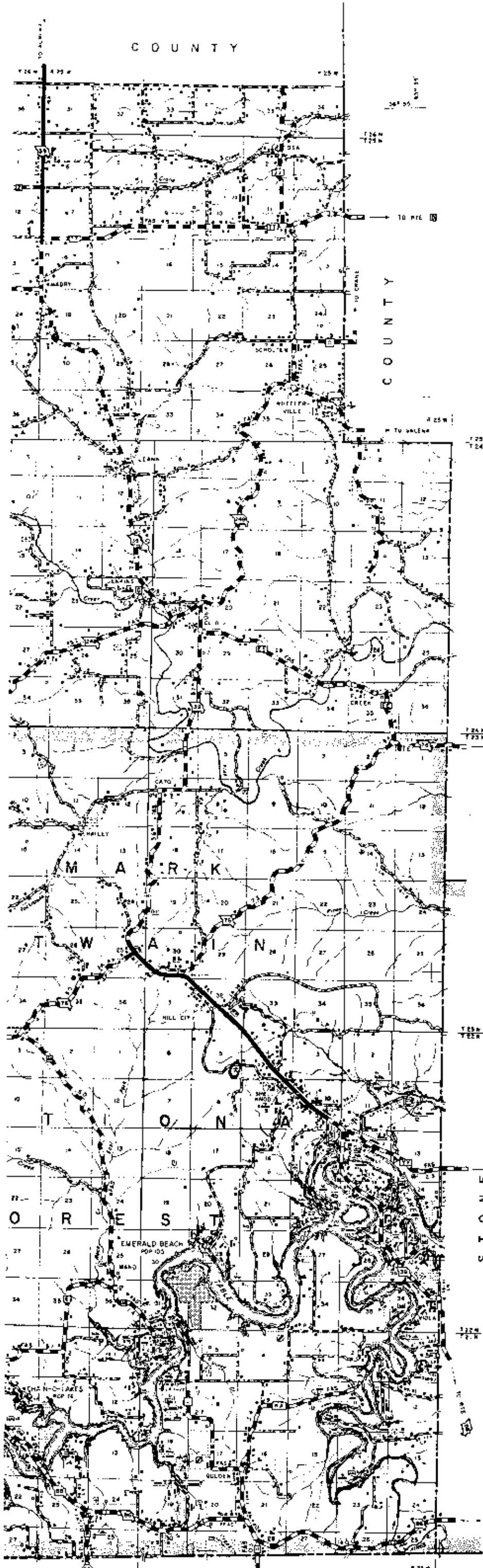






COUNTY

LEGEND



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>Private Road</li> <li>Unimproved Road</li> <li>Graded and Drained Road</li> <li>Soil Surfaced Road</li> <li>Gravel or Stone Road</li> <li>Boundaries Road - Low Type</li> <li>Paved Road</li> <li>Frontage Road</li> <li>Divided Pavement</li> <li>City Streets</li> <li>Points between which Distances are Measured</li> <li>Interstate Numbered Highway</li> <li>U.S. Numbered Highway</li> <li>State Numbered Highway</li> <li>State Lettered Highway</li> <li>Designation of Road when Built</li> <li>Federal-aid Primary Highway System</li> <li>Federal-aid Secondary Highway System</li> <li>Railroad - Single Operating Company</li> <li>Railroads Adjacent - Separately Operated</li> <li>Railroad Station</li> <li>Railroad Grade Crossing</li> <li>Railroad Above</li> <li>Railroad Below</li> <li>Railroad Tunnel</li> <li>Military Air Field</li> <li>Commercial or Municipal Air Field</li> <li>Landing Area or Strip</li> <li>Airway Beacon Light</li> <li>Operated Ship and Barge Lines</li> <li>Dock Piers or Landing</li> <li>Ferry - FF - 1st - FF - Free</li> <li>Navigable Stream</li> <li>Dam</li> <li>Dam with Lock</li> <li>Dam with Road</li> <li>Wide Stream</li> <li>Narrow Stream</li> <li>Intermittent Stream</li> <li>Drainage Ditch</li> <li>Marsh or Swamp Land</li> <li>Reservoir - Pond or Lake</li> <li>Reservoir with Dam</li> <li>Levee or Dike</li> <li>Levee or Dike with Road</li> <li>Natural Ford</li> <li>Paved Ford or Low Water Bridge</li> <li>Bridge - General (span longer than 20 feet)</li> <li>Small Bridges Closely Spaced</li> <li>Crawbridge</li> <li>Suspension Bridge</li> <li>Arch Bridge</li> <li>Steel Truss Bridge</li> <li>City - Town and Village Limits</li> <li>Delimited Urban Area Line</li> <li>Park or Reservation Boundary</li> <li>State Line</li> <li>County Line</li> <li>Civil Township Line</li> </ul> | <ul style="list-style-type: none"> <li>Congressional Township Line</li> <li>Section Line</li> <li>Land Grant Survey Line</li> <li>Transmission Line</li> <li>Refuse Garbage or Trash</li> <li>Auto Graveyard</li> <li>Scrap Metal</li> <li>Scrap Building Material</li> <li>Summary Fill</li> <li>Other</li> <li>Correctional Institution</li> <li>Radio or Television Station</li> <li>Scene Site</li> <li>Small Park</li> <li>Roadside Park</li> <li>Picnic Grounds</li> <li>Playground Ball Field etc.</li> <li>Bathing Beach or Pool</li> <li>Drive-in Theatre</li> <li>Tourist Court or Motel</li> <li>Camp or Lodge</li> <li>Fish Hatchery</li> <li>Bird Sanctuary</li> <li>Game Farm or Preserve</li> <li>Golfing Club or Golf Course</li> <li>Hall Ground or Race Track</li> <li>Farm Unit</li> <li>Dwelling other than Farm</li> <li>Dwellings Closely Spaced</li> <li>Seasonal Dwellings</li> <li>Seasonal Dwellings Closely Spaced</li> <li>Motel or Inn</li> <li>Church</li> <li>Hospital</li> <li>Cemetery</li> <li>Church with Cemetery Adjacent</li> <li>Store or Small Business</li> <li>Factory or Industrial Plant</li> <li>Sawmill Stationary</li> <li>Mine or Quarry</li> <li>Nursery</li> <li>School House</li> <li>Consolidated or Large School</li> <li>Post Office</li> <li>Town or Community Hall</li> <li>Mixed Cultural Features Closely Spaced</li> <li>County Home - Farm or Infirmary</li> <li>Pumping Station - Oil or Gas</li> <li>Combined Dwelling and Business</li> <li>Weight Station</li> <li>Forest Ranger Station</li> <li>Forest Lookout Tower</li> <li>SPD Maintenance Shed</li> <li>State Highway Patrol Station</li> <li>State Capitol</li> <li>County Seal</li> <li>Other Cities, Towns and Villages</li> </ul> |
|---|---|

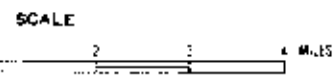


Leo Journagan Construction Company  
 Shell Rock Site #3  
 Permit 287

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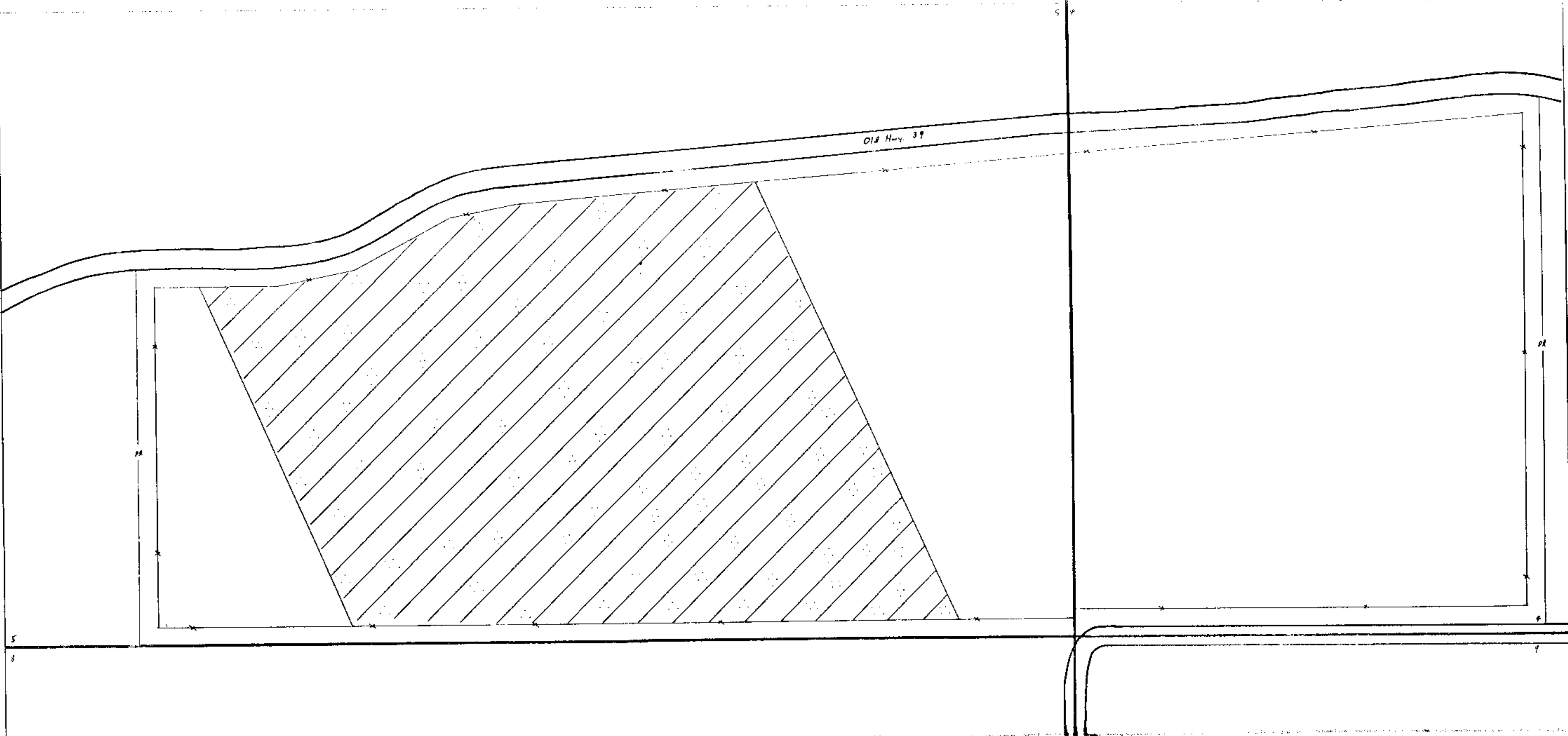
# GENERAL HIGHWAY MAP BARRY COUNTY MISSOURI

PREPARED BY THE  
 MISSOURI HIGHWAY AND TRANSPORTATION DEPARTMENT  
 DIVISION OF PLANNING  
 IN COOPERATION WITH THE  
 U.S. DEPARTMENT OF TRANSPORTATION  
 FEDERAL HIGHWAY ADMINISTRATION



DATE	DESCRIPTION	BY
12-28-88	STATE HIGHWAY INVENTORY	LSU
2-6-89	COMPLETE NEW INVENTORY	SAD
DATE	REVISIONS	

ARKANSAS



Acres	Symbol	Description
125	[Hatched]	Long Term Plan
46	[Diagonal Lines]	Bonded Area
	[Dotted]	Bond Released
	[G]	Grading Completed
	[T]	Topsoil Replaced
	[I]	Impoundment
	[d]	Development
	[a]	Agriculture
125	[w]	Wildlife

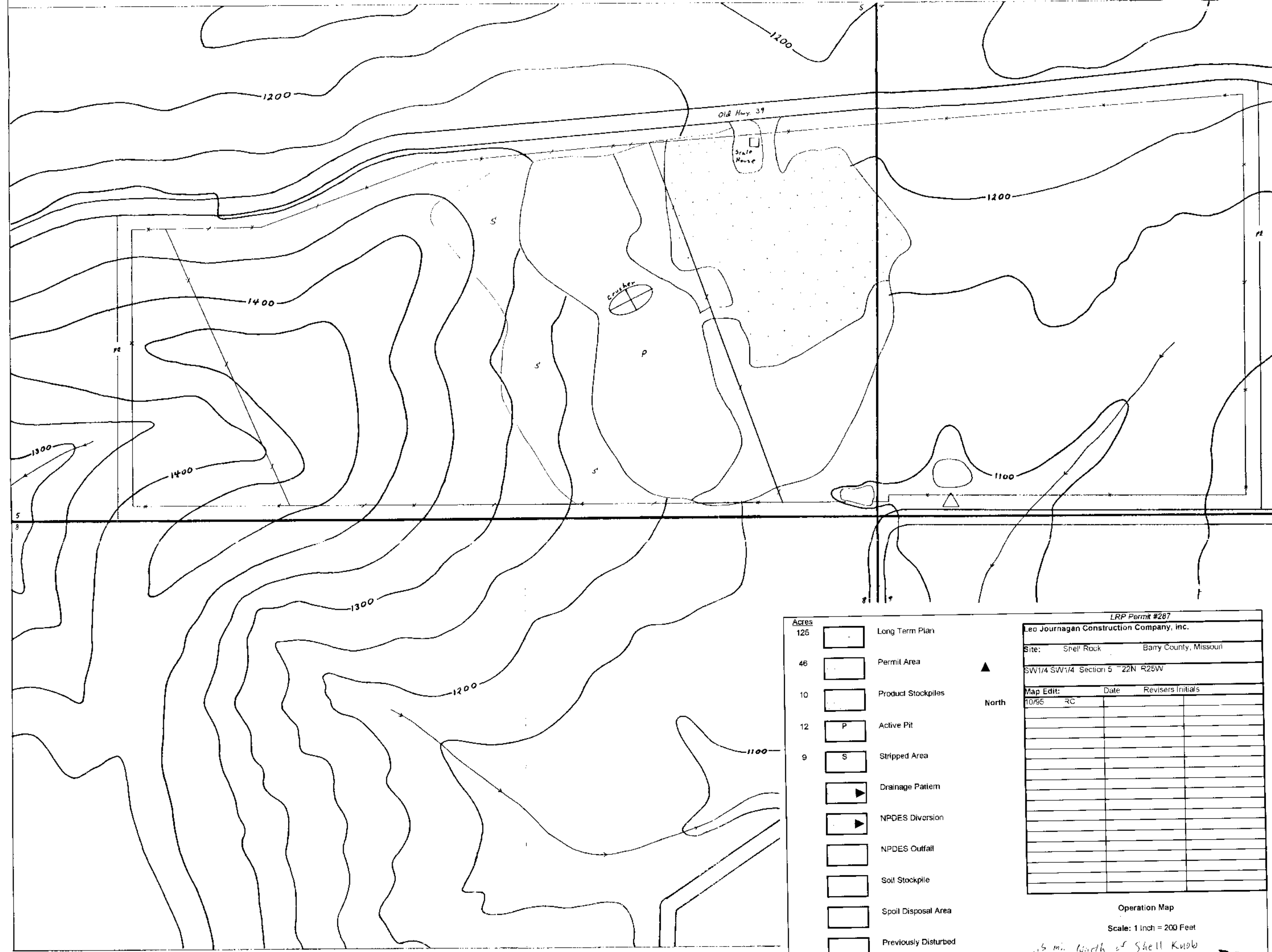
North

Reclamation Map

Scale: 1 inch = 200 Feet

LRP Permit #287		
Leo Journagan Construction Company, Inc.		
Site:	Shell Rock	Barry County, Missouri
SW1/4 SW1/4 Section 5 T22N R25W		
Map Edit:	Date	Revisers Initials
10/95	RC	

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Acres	Symbol	Description
125	[Hatched]	Long Term Plan
46	[Diagonal Lines]	Permit Area
10	[Dotted]	Product Stockpiles
12	[P]	Active Pit
9	[S]	Stripped Area
	[Arrow]	Drainage Pattern
	[Arrow]	NPDES Diversion
	[Arrow]	NPDES Outfall
	[Box]	Soil Stockpile
	[Box]	Spoil Disposal Area
	[Box]	Previously Disturbed

North

Operation Map

Scale: 1 inch = 200 Feet

LRP Permit #287		
Leo Journagan Construction Company, Inc.		
Site:	Shell Rock	Barry County, Missouri
SW1/4 SW1/4 Section 5 T22N R25W		
Map Edit:	Date	Revisers Initials
10/95	RC	

1.5 mi. north of Shell Rock  
on old Hwy. 39.

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